

BUILD A CUSTOM FOR \$100

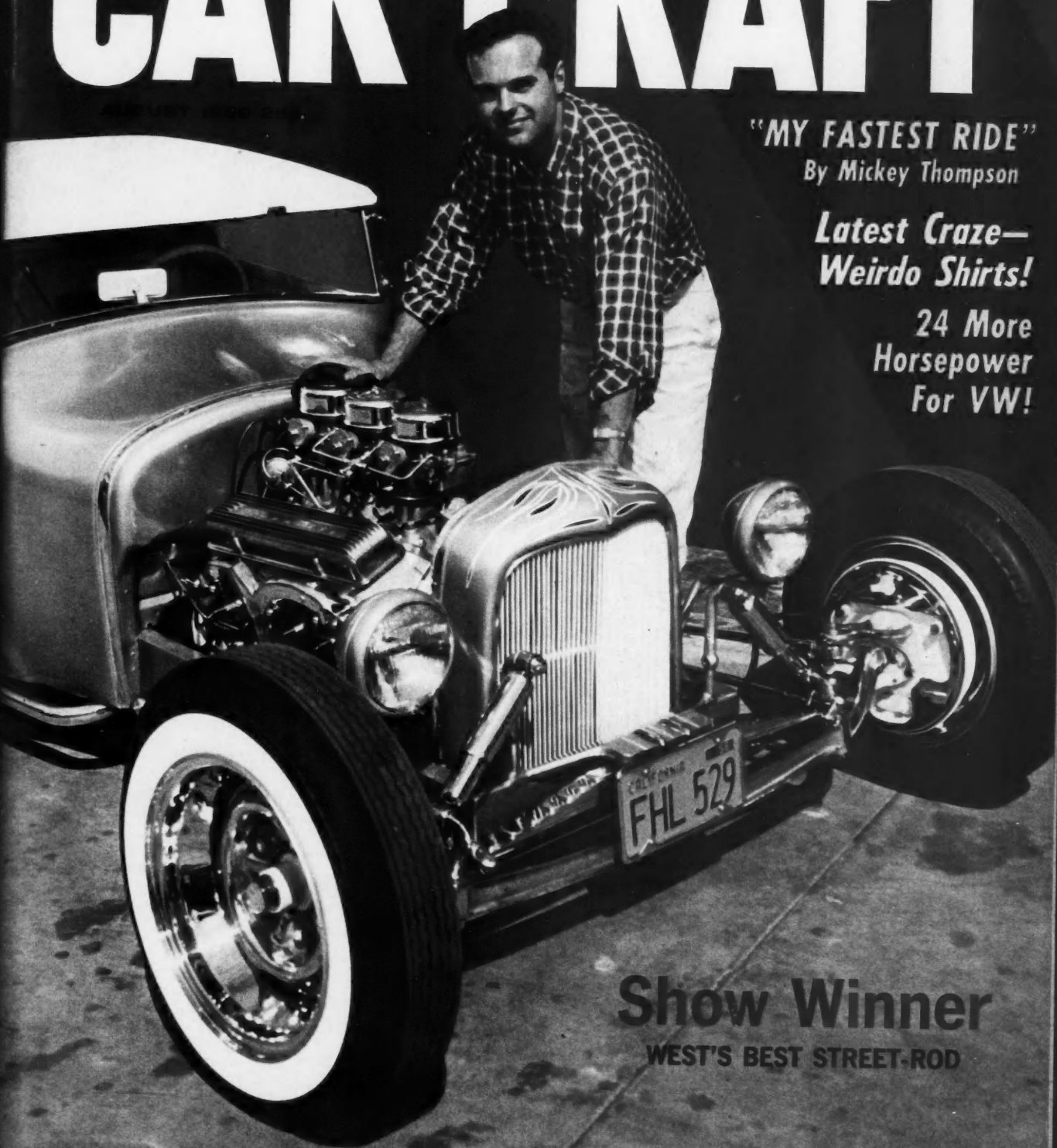
CAR CRAFT

"MY FASTEST RIDE"

By Mickey Thompson

*Latest Craze—
Weirdo Shirts!*

*24 More
Horsepower
For VW!*



Show Winner
WEST'S BEST STREET-ROD

HILDERBRANDT

WEIAND

VERTEX

ORDER BY MAIL

HONEST

NEW ITEMS

ORDER BY MAIL

NEW LOW PRICES

HONEST ADAPTORS

HEDMAN

NEW LITE WEIGHT
ALUMINUM PLATE
TO ADAPT32-48 Ford & Merc Transmission
49-50 Mercury Transmission
32-51 1/2 to 1 1/2 ton Ford
Truck
All Lincoln Transmissions
thru 47To —
49-57 Olds Engine
49-54 Cadillac Engine
Complete with pilot
each bushing
Honest Charley
price
\$16.95

You Pay Postage

55-58 OHV Chevrolet
V-8 Engine To
Early Ford Transmission
with pilot
bushing
\$37.95

You Pay Postage

54-57 OHV Ford and Merc
Engine to Early Ford Trans.
Complete
\$37.95

You Pay Postage

Go the Straight and Narrow
Path With A —
HOT ROD STEERING ARMS
Use Late Spindles on
Early FordNOW MADE FROM
STRESS PROOF STEEL
FOR ADDED SAFETYCHROME PLATED
Each . . . \$7.25
CADMIUM PLATED
Each . . . \$5.25
HONEST No. 63

SPARK PLUG WIRE

SUMPIN
NEW UNDER THE HOOD
ADD PEP TO ANY CARClear Plastic or Transparent
red clear plastic Spark Plug
Wire . . . For Ford \$8

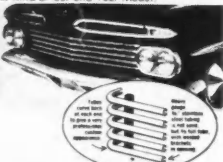
Via Pay Postage

OHV V-8 Engines need 28 ft.
F. H. Fords need 25 ft.6-12 VOLT CONVERSION
Complete Kit — Eliminates
need for resistors, Replacement
of starter, generator,
instruments, etc., engine
starts on 12 volts—Accessories
operate on 6 volts.HONEST No. 79
Each Kit Complete \$8.95
We pay PostageNEW ALUMINUM
Adaptor To Hook
55-59 V-8 Pontiac
To Early Ford Transmission.NO. HA121A
HONEST
PRICE
You Pay Postage 16.9555-58 OHV Chevrolet
engine to Packard Floor
Shift Transmission
Complete
\$25.95HONEST No. HA 102
You Pay PostageHONEST FLOOR SHIFT CONVERSION KITS
NEW — IMPROVED
FINGER-TIP SHIFTING
With Narrow Plates For Faster Installation

SHIFTY, BUT STILL HONEST

Complete Conversion Kit To Convert Column Shift On Cars
listed Below to Floor Shift Operation.HCH-2 1940-'58 CHEV—All HME-3 55-57 MERC Std Only
HCH-1 49-54 FORD Std & OD HCH-1 49-50 OLDS—All
HME-2 55-57 FORD Std Only Each \$29.95
HME-1 49-51 MERC Std HCD-1 CAD - LASALLE Side
& OD Shift \$24.95
HME-2 51-54 MERC Std&OD WE PAY POSTAGECHROME SHIFTING STICK AND BALL
22 Inch Gear Shift Extension for above floor shift kits. May be
cut off if too long. Chrome Each 4.95Panoramic Polished Bakelite Knob in black, red, candy apple
red, blue, green, or grey. Each 1.95

HONEST CUSTOM TUBE GRILLES

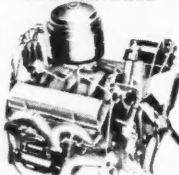
At The Price You've Waited For.
Sweeping Tubular Stainless Grille Bars Completely Pre-Assembled.
Guaranteed Rust Proof — Full 3 1/4" diameter sections.
Available For 52 - 59 Ford - 55 - 59 Chevrolet - 58 T Bird
Must Know Kind of Car and Year Model

HONEST NO 86 Complete Pre - Assembled Kit each 19.95

WE PAY POSTAGE

HONEST LAKE PLUGS FOR ALL CARS
AT A THINKING MAN'S PRICE

New Low HONEST Price

Triple Chrome Plated 18 Gauge Steel Tubing.
Direct Exhaust Escape with plates removed boosts power
for competition running.Packed in pairs, kits are complete with blocking plates,
gaskets, chrome hangers, and all fasteners.
Honest Nos.
HP28 Complete 28" Kit for both sides \$ 9.95
HP56 Complete 56" Kit for both sides \$21.95V-8 CHEVY TO
6 CYLINDER CHEVY
TRANSMISSION
Adapts any V-8 Chevy En-
gine 1955-1958 to any 6
Cylinder Chevy Passenger
Car Transmission from 1940
to 1954HONEST No. HA 101
EACH \$37.95HONEST
ADAPTOR TO USE
Cadillac or LaSalle
Transmission with
1955 thru 1958 V-8 Che-
vrolet Engine
Complete
\$25.95HONEST No. HA 103
You Pay PostageSTUDEBAKER
AND
LARK OWNERSHONEST ADAPTOR
TO PUT
1955-1958
V-8 CHEVROLET ENGINE

HONEST NO. HA111 You Pay Postage

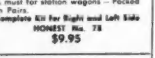
HONEST SUPER FUEL BLOCK
KITS
CHROME FUEL BLOCK
Complete With All Hose, Fit-
ting and Clamps Necessary
For Your InstallationYour Choice of Clear, Red,
Blue or Green. Top Quality
Thick Wall Vinyl Hose
HF2-2 Complete Kit For
Dual Carb Installation — 7.95HF3-3 Complete Kit For
Triple Carb Installation — 8.95HF4-4 Complete Kit For
Quad Carb Installation — 9.95
WE MUST KNOW NUMBER
of Carbs, Kind of Car, Make
of Carburetors and Any Odd
Fuel Pump Set Up.

1957 FORD

FENDER EYEBROWS
Add greatly to the appear-
ance of all 1957 Fords. Gives
front edge of fenders a
beautiful, finished look in
gleaming stainless steel.
Nothing to remove, just
snaps on for easy and per-
manent installation. If de-
sired, holes may be drilled to
mount.CLOSE OUT NO. 11 Pair 1.95
We Pay PostageCHROME OUTSIDE TAILPIPES
Now in one complete package at a
reasonable price — Kit Complete
Nothing Else to Buy — No welding
necessary — mount along fender
with simple tools — Stop drac-
toring off rear bumper and paint
A must for station wagons — Packed
in Pairs

HONEST No. 78

\$9.95

HEAT RESISTANT
ENGINE ENAMEL
RED - BLUE - GREEN
1/2 Pint
\$1.00 Postpaid
HONEST No. 12NEW POWER
FOR THE
STUDE1951-1958
6 Cyl. and 8 Cyl.
STUDEBAKER
TRANSMISSION
Except 1956 Golden Hawk

- TO -



EACH 24.95

HONEST "BONIFIED"
ADJUSTABLE MOTOR
MOUNTSNew Improved Mounts Allow Front and Rear Adjustment To
Allow For Different Adaptor Spacing — Universal Design Lets
You Swap Cars Without Buying New Mounts. Through Bolt
Mounting Eliminates Bonded Pad Break Worries. Makes En-
gine Swap A Cinch — Installs Late Model V-8 Engines into Ford
Merc-Stude and 8 Cyl. Chevrolet Frames.

ENGINE	FRAME	PART NO	PRICE
Buick To 28-34 Ford		B202A28	16.95
Buick To 35-40 Ford & Merc		B202SP150	16.95
Buick To 41-48 Ford & Merc		B202A49	15.35
Buick To 49-53 Ford & Merc		B202A49	16.95
Cad To 28-34 Ford		CA202A28	16.95
Cad To 35-40 Ford & Merc		CA202SP150	15.35
Cad To 41-48 Ford & Merc		CA202	13.00
Cad To 49-53 Ford & Merc		CA202A49	16.95
Chry To 28-34 Ford		CH202A28	76.95
Chry To 35-40 Ford & Merc		CH202SP150	15.35
Chry To 41-48 Ford & Merc		CH202	13.00
Chry To 49-53 Ford & Merc		CH202A49	16.95
Chry To 28-34 Ford		CH202A28	16.95
Chry To 35-40 Ford & Merc		CV202SP150	15.35
Chry To 41-48 Ford & Merc		CV202	13.00
Chry To 49-53 Ford & Merc		CV202A49	16.95

OHV Ford-Merc-T Bird Engines Except 332 & Up Listed Be-
low As F.M.F-M To 28-34 Ford FM202A28 16.95
F-M To 35-40 Ford & Merc FM202SP150 15.35
F-M To 41-48 Ford & Merc FM202 13.00
F-M To 49-53 Ford & Merc FM202A49 16.95

Olds To 28-34 Ford OL202A28 16.95

Olds To 35-40 Ford & Merc OL202SP150 15.35

Olds To 41-48 Ford & Merc OL202 13.00

Olds To 49-53 Ford & Merc OL202A49 16.95

Pontiac To 28-34 Ford PO202A28 16.95

Pontiac To 35-40 Ford & Merc PO202SP150 15.35

Pontiac To 41-48 Ford & Merc PO202 13.00

Pontiac To 49-53 Ford & Merc PO202A49 16.95

Chev To 53-57 Studebaker CV55357 13.00

Chev To 49-54 Chev Six CVC4954 13.00

IMPORTANT: If Closed Drive Shaft Is Retained in 1928 To 1948
Ford Chassis — No. AD-75 Anti-Chatter Pre-Load Adjusters
Are Available To Eliminate Engine Chatter

No. AD-75 Pre-Load Adjusters — Set .84

Dropped Drag Link. Designed To Clear Pan and Starter On All
OHV V-8 Engines.

DLF49 — 49-51 Ford Drag Link EACH — 22.50

DLF52 — 52-53 Ford Drag Link EACH — 24.50

Enclosed is \$_____ for payment in full (or deposit of
25% if C. O. D.)

NAME _____

MY CAR IS A _____ YEAR _____ MODEL _____ BODY _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

Quantity Stock No. Description Price

HONEST CHARLEY SPEED SHOP INC.

Box CC 1904
Chattanooga, Tenn.

Traction-Master Co.

STELLING & HELLING

MAGNUM ENGINEERING

MOON

Quality

THOMAS

NOW ... the first complete book on Karting! LET'S GO KARTING

Karting is America's fastest-growing automotive sport. It's safe, simple, fun for all. Now, in this book—the first complete volume on karting—you'll find all the information you want to know. You'll learn about the background of karting, what makes a kart a kart, chassis and handling, parts and suppliers, engines, putting "go" into a kart, how to do-it-yourself. In addition, there are authoritative chapters on the Go-Kart Club of America, general kart maintenance, and "specials" and the future. If you're interested in karting, you'll definitely want this one.



only 75¢
each at
newsstands now!
(or mail
coupon
today!)

**TREND
BOOKS**
5959 Hollywood Blvd.,
Los Angeles 28, Calif.

Enclosed is \$ _____ @ 85¢ each (covers postage, etc.)

Send me _____ copies of LET'S GO KARTING TB-185

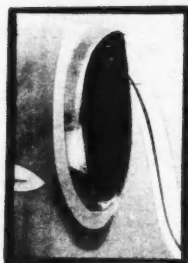
(please
print)
NAME _____

ADDRESS _____

CITY _____

ZONE _____ STATE _____

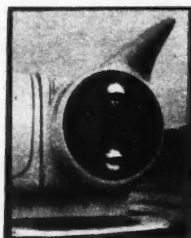
CUSTOM TAILLIGHTS NEWEST PRODUCT FROM THE ROTH STUDIOS



"CHEVY STARFIRES"
Smooth durable plastic tail-
light lenses for '53-54 Chev.
Replaces dull looking stock-
lenses and gives your Chevy
the Custom look
for only..... pair **\$9.95**

WE PAY POSTAGE ON ALL
ORDERS. SATISFACTION
GUARANTEED OR YOUR
MONEY BACK...

"FORD EXCALIBERS"
Made for '57 Fords. Come
with 2 plastic and 2
chrome bullets or with
4 plastic bullets
only..... pair **\$12.95**



"CRIMSON LANCERS"
For '57 Chevys. 2 stock
lenses plus 4 lenses for
mounting on the bumper.
Set of 2..... **\$6.95**
Set of 6..... **\$14.95**
Send for complete catalog
of Custom Taillights. 25¢



Now for the first
time anywhere
WEIRDO SHIRTS
in triple brilliant colors. The world's
weirdest pictures, price
Now for summerwear, Crew Neck **\$5.25**
Weirdo Shirts, price **\$3.49**
Please include sweater size.
Send for complete catalog, also includes pin-
stripping materials. 25¢



"GEARSHIFT KNOBS"
For all floor shifts. We will
also drill them if you send
the drill size. Each is made
to your sketch or try the
above... 5 1/2 x 1 1/2 **\$4.50**
Aluminum
Send for complete catalog of
Gearshift Knobs. 25¢

"PINSTRIPING KITS"

Secret paint mixture by
ROTH himself. Used on the
country's top "Rods" and
"Customs." Hand trimmed
Brushes - are custom made
for Roth in Germany, and
have Roth printed on the
handle. Easy to use.



Hand Trimmed Brush..... **\$1.50**
Large Can Paint..... **2.00** } state
(Real Gold Stripping Paint)..... **5.00** } color
Send for catalog of paints and brushes. 25¢



Send for complete catalog of
Custom Taillights and Gear
Shift Knobs. 25¢

STUDIOS

"World's Craziest Artists"
4616 Slauson, CC-8, Maywood, Calif.



"CHROME BULLETS"
Go wild with you: imagination, use
them on Bumpers, Hub Caps, or
Grilles, even Taillights.
2" dia. x 2 1/2" high..... **\$ 4.95**
4" dia. x 3" high..... **7.95**
4" dia. x 5" high..... **12.95**
"COLOR CHROMING" • "PINSTRIP-
ING" • "HAND PAINTED WEIRDOS"
• "SCALLOPING" • "FLAMING"

**GIANT NEW
LOCATION**



BUILD A CUSTOM FOR \$100!

The bill may be phony, but the headline's strictly on the level — you can customize a car for only \$100, and this issue of **CAR CRAFT** tips you off to the whys and hows (see P. 14). We'll be featuring various "C-note customs" regularly... naturally, you won't want to miss a single copy, so be sure to...

**SUBSCRIBE TODAY!
SPECIAL INTRODUCTORY OFFER!**

5 issues of **THE NEW, \$1**
BIGGER
CAR CRAFT

CAR CRAFT

5959 HOLLYWOOD BLVD., LOS ANGELES 28, CALIF.

Here's my dollar.
Please send me the next **5**
issues of **CAR CRAFT**.

(please print)
NAME _____

ADDRESS _____

CITY _____

ZONE _____ STATE _____

CAR

Robert E. Petersen—Publisher

Lee O. Ryan—General Manager

Ted A. Johnson—Business Manager

EDITOR

Dick Day

MANAGING EDITOR

Don Evans

ASSOCIATE EDITOR

Jim Gilbert

EDITORIAL DESIGN

Arl Smith

EDITORIAL PRODUCTION

Yvonne Hull

Marie Dennell

ADVERTISING MANAGER

Pete Hallock

ADVERTISING PRODUCTION

Bill Low

PHOTOGRAPHERS

Bob D'Olive

Al Palecz

Colin Creitz

Pat Brolier

TECHNICAL EDITORS

Don Francisco

John Geraghty

CONTRIBUTING EDITORS

Bob Hardee

Frank Faraone

George Barris

Bud Lang

Woody Higgins

John Eddy

Bob Hegge

Pete Sukalac

PETERSEN PUBLISHING COMPANY ADVERTISING OFFICES

California

5959 Hollywood Blvd., Los Angeles 28

155 Montgomery St., Room 210, San Francisco 4

Michigan

524 Book Bldg., Detroit 21

Illinois

360 N. Michigan Ave., Chicago 1

Ohio

834 Schofield Bldg., Cleveland 15

New York

17 E. 48th St., New York 17

Car Craft, U. S. Copyright 1958 by Petersen Publishing Company, 5959 Hollywood Boulevard, Los Angeles 28, California. Second class postage paid at Los Angeles, California. Subscription rates: U. S. Possessions, Canada — 1 year \$3.00, 2 years \$5.00, 25¢ per copy. Overseas — 1 year \$4.00, 2 years \$7.00. Give three weeks' notice for change of address. Contributing material should be mailed to 5959 Hollywood Boulevard, Los Angeles 28, California. All contributions must be accompanied by return postage. Petersen Publishing assumes no responsibility for loss or damage thereto.

CAR CRAFT

CRAFT

Volume 7
Published Monthly
Number 4

Wally Parks—Editorial Director
Al Isaacs—Art Director
Al Benedict—Advertising Director

Gordon Behn—Circulation Director
Jack Preston—Production Director
Bob Nylund—Credit Manager

features

- 14 \$100 CUSTOM
It doesn't take much money to restyle the '57 Ford
- 20 FOR SHOP 'N KICKS
A '50 Ford sedan has been converted to a sharp pickup
- 22 VIM AND VIGOR FOR THE VW
24 more horses make the little imports real runners
- 26 CLEAN AND COMPETITIVE
Illinois drag coupe is a good looker as well as a go'er
- 28 MY FASTEST RIDE
Mickey Thompson's experiences as the fastest man at Bonneville
- 34 FLIP-TOP "T"
One of the rarest of roadsters is done up in fine style
- 36 WEIRD SHIRTS
Three crazy artists are caught during rituals in latest fad
- 38 GOLDEN VET
Rhode Island Ford was built for show—and is cleaning up
- 40 WOMEN IN ACTION
Distaff daredevils show real "savvy" on the half midget track
- 42 RESTYLING THE CORVETTE
Dick Katayanagi changes appearance of America's sports car
- 46 DRAGGIN' DREAMBOAT
A sleek custom that moves out at 92 MPH in the quarter
- 48 HERE'S HOW:
—Build your own nerf bars with a new gimmick
—License shrouds are the answer to an old problem
- 54 SCALED-DOWN SCRAMBLER
Indy-type quarter midget features a side mounted engine

departments

- | | |
|-------------------|--------------------------------|
| 8 CC SHOPS | 60 ¼ — ½ MIDGET BULLETIN BOARD |
| 12 LETTERS | 62 WHAT'S YOUR PROBLEM? |
| 64 CUSTOM QUERIES | |

cover

Raymond Anderegg's beautiful Green Gold '27 T roadster is the result of nine years spare-time labor and a cash outlay of \$4500.
—see page 34.

—Ansochrome by George Barris

Join
the

WAHLBORG
WINNERS



In the country's fastest growing automotive sport—¼ and ½ midget competition—one name stands out from the rest—Wahlborg! Wahlborg is the holder of more track records than any other make in America. These small cars are famous for their safety, performance, durability and clean-lined beauty. And they wear the Champion Label, because of their winning habits. Wahlborg models are designed and built to WIN!

WAHLBORG ¼ MIDGETS
\$450 - \$550

Write for our
new brochure.

WAHLBORG ½ MIDGETS
\$550 up



Meet the WAHLBORG SCRAM-BUGGY

most durable car of its type—with the heavy duty frame that takes knocks without giving an inch! Just won't Tip . . . trouble-free . . . precision built with arc-welded strength! Available with 2 or 4-cycle engine— with or without clutch.

MODELS FROM \$137.50



WAHLBORG ENGINEERING CO.

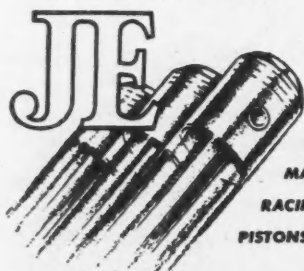
3103 Pacific Coast Hwy. CC-8
Torrance, Calif. - Box 1277

WORLD'S FINEST

RACING PISTONS NOW AVAILABLE

FOR 1/4 & 1/2 MIDGETS

Made to racing standards of finest aluminum alloy. See your dealer or write to:



Dealer
inquiries
invited

CUSTOM
MADE
RACING
PISTONS

ENGINEERING CORPORATION

825 DATE AVENUE ALHAMBRA, CALIFORNIA

MAKE MORE MONEY

IN AUTO MECHANICS AND DIESEL

You are needed in auto garages, airplane factories, farm shops, experimental and government labs, wherever cars, engines, and trucks are repaired, and serviced. National Schools Shop Method Training prepares you at home, in spare time, for these fascinating opportunities. You get everything you need, including lessons, diagrams, manuals, consultation privileges, graduate employment service. Low tuition; pay as you learn.

YOU GET AND KEEP ALL THIS EQUIPMENT



NATIONAL
SCHOOLS

LOS ANGELES 37, CALIFORNIA

NATIONAL SCHOOLS, DEPT. #85T-89
4000 S. FIGUEROA ST., LOS ANGELES 37, CALIF.

Rush free Auto Diesel "Opportunity" Book and sample lesson. No salesman will call.

NAME _____ AGE _____

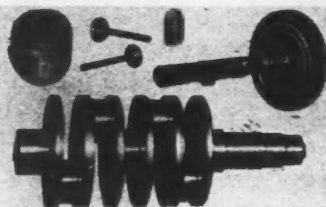
ADDRESS _____

CITY _____ ZONE _____ STATE _____

☐ Check if interested ONLY in Resident Training at Los Angeles. VETERANS: Give date of Discharge

VW STROKER KIT

GUARANTEED NOT TO BREAK



This Volkswagen Stroker Kit was developed for street or race use—not just a welded crank but a precision machined billet. With stock bore, 1/4" stroke—79 cu. in., \$199.50. 1/2" stroke—86.5 cu. in., \$237.50. Kit includes pistons, rings, rods (exch.), inserts, cam (re-ground for street or race, exch.). Send 25¢ for complete dynamometer curves on Volkswagen engines. Write Dept. CC.

WEBER TOOL CO.

2990 Ramona Blvd. Los Angeles 33, California

SPEAKING

of

the editor



IN LITTLE LESS than a month from now a small group of hot rodders will tow a sleek streamliner over the desert highways of California, Nevada, and Utah. Their destination—the vast Bonneville Salt Flats. Their goal—to break the World's Land Speed Record!

It is quite difficult to convey the inner desires of these young men who, for the past months have been burning the candle at both ends in preparing the streamliner for its all-out assault on the world's speed record. But as they cinch Mickey Thompson in the small cockpit of his car and push him off straddling the black line that will guide him through the lengthy speed course, you can be assured that there will be visual evidence of one thought among he and his crew—determination!

CAR CRAFT is fortunate this month in presenting one of the most entertaining and informative features that has been our pleasure to set in type. The story is "My Fastest Ride." It's Mickey's exploits of a year ago, when he stopped off at Bonneville for a fast crack at the National Speed Trial's record while enroute to NHRA's National Drags. Strangely enough, this so-called "quickie" stop-over resulted in such high speeds with his dual engine streamlined dragster—that Mick found himself knocking on the door of breaking the 300 miles per hour mark, long a barrier for hot rod built streamliners—and he competing with a car basically designed for drag racing. Although you have possibly read of his experiences in other automotive magazines since his surprise speed runs of last year—you have not heard it as only Mickey can tell of the sweat, jubilation, and heartbreaks. There is one exciting guarantee after reading the feature.

From the time his four engine car roars to life, accelerates, then diminishes down the Bonneville speed course this year—you can bet you'll be right there in the cockpit pulling for him all the way!

On the lighter side is the photograph above picturing yours truly and automotive stripper, Ed Roth. The camera's lens caught us in a true art discussion of how a has-been cartoonist (I still have my speed-ball pen and empty India ink bottle—somewhere) needn't worry about old age for he could always fall back and regroup living successfully painting extra weird WEIRD SHIRTS. Ed was kind, he agreed. I sensed doubt in his mind so I quickly wrestled him for his airbrush and proved my point. In the end I conceded, not only to Roth, but to Dean Jeffries and Pete Millar. If you're not acquainted with these artistic gentlemen, and don't think that I'm just a name dropper, then I suggest that you turn to page 36 and get to know them better. A pretty weird group!

Possibly you are not aware that a custom car can be bought right over the counter of your local automotive accessory store. It's true. With a small investment—say one hundred dollars, and some imagination, you can get pretty wild with that stocker sitting out there in your driveway. It all comes about through the magic of bolt-on accessories. Come to think of it, you don't need to call upon your imagination—CAR CRAFT has already done this for you if you happen to be a '57 Ford owner. On page 14 you will find our first "C-Note" custom car. This is just one of many that will follow in future issues.

—Dick Dey

HIGH PERFORMANCE QM IGNITION



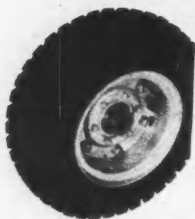
Specifically tailored for the AU7R engine, this Midget Center ignition is oil proof and has positive point action at high R.P.M. Featuring hi-tensile aluminum casting and long lasting RBS super tungsten points. Satisfaction guaranteed.

We furnish new AU7R engines
Modified Stock Engines \$245.00 outright
Full "B" Modified Engine \$295.00 outright
Full "AA" Modified Engine \$345.00 outright

MIDGET CENTER
MANNING MODIFIED ENGINES
1719 W. Rosecrans Blvd.
Gardena, Calif. 90247



Midget Racing WHEELS



4" - 5" and 6" Standard and Super Widths. All hub lengths, all bearings from 1/2" to 1" Bore. Also, OFFSET HUBS for Sprockets or Pulleys.

All Wheels are STEEL, BOLTED construction and cadmium plated.

We stock Goodyear, Firestone, Goodrich and General Tire & Tubes. Also complete line of industrial wheels.

Special discounts to dealers and manufacturers.

Write for name of dealer in your locality to:

WHEELS DEPT. CC-8
NALPAK CORPORATION

1110 E. Florence Ave.
Los Angeles, Calif. • Phone LU 3-1056

FASTER PICK-UP AND GO! FOR YOUR VOLKSWAGEN



For your Volkswagen, get power increase throughout the RPM range without increasing fuel consumption or sacrificing engine durability. The easily installed Hi-Torque Power Kit includes 2 hi-compression heads with big ports, big valves; 2 Solex carburetors, 2 special intake manifolds, complete throttle linkage, gaskets. See your dealer or write direct.

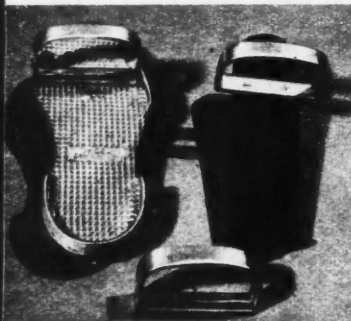
EMPI EUROPEAN MOTOR PRODUCTS, INC.
P.O. BOX 649-CC • RIVERSIDE, CALIF.

CC shops



CHROMED WHEELS

Available now are chromed wheels in all popular makes. Sizes are: 14, 15, 16-inch. Reversed wheels also available. \$22.50. Appliance Plating, Dept.-cc, 1719 W. Rosecrans Blvd., Gardena, California.

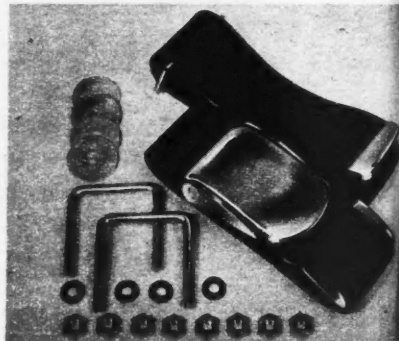


THROTTLE GUARD

Easily attached by bolting to pedal, new throttle guard is recommended by N.H.R.A. Guard assures positive throttle shut-off per chance linkage binds, fails. Aluminum constructed. \$1.50. Service Center, 15729-cc Atlantic Blvd., Compton, Calif.

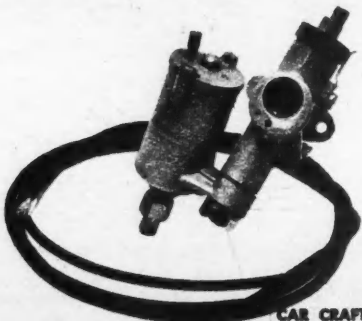
SAFETY BELTS

Life-saving seat belts exceed all strength specifications; chromed release buckle, ten harmonizing colors. "Impact Saf-Tee Model" kit includes mounting hardware. \$10.95 per passenger. Ray Brown Automotive, Dept.-cc, 5656 Santa Monica Blvd., Los Angeles 38, Calif.

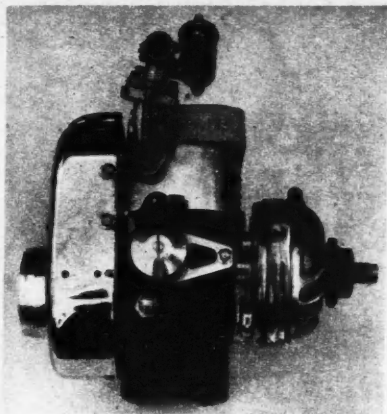


AMAL CARBURETORS

While they last, Amal 33% carbs are now priced at \$13.95 each, regular price \$21.95. Slide valve carb has 1/2" venturi. Proven winner in Q.M. racing. Send money order plus 65¢ for each carb to: Steen's, 19-cc East Valley Blvd., Alhambra, California.

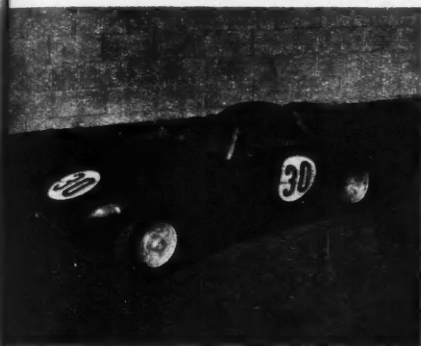


CAR CRAFT



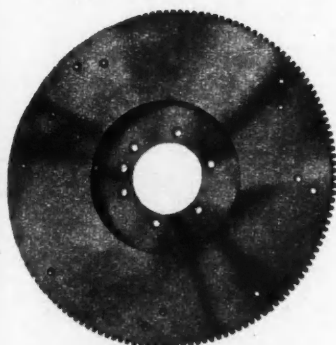
RACING IGNITION

For Continental AU7R engine, oil proof ignition has heavy spring on distributor lobe, no flutter point action at high RPM. Aluminum cast, guaranteed for long life. \$17.95. Midget Center, 7135-cc Sepluveda, Van Nuys, California.



MINIATURE SPORTSTER

"Monza" body hides swing axle front with coil springs, Continental 3-h.p. engine, Naugahyde upholstery. \$395. Charcon Inc., 7137-cc Laurel Canyon Blvd., N. Hollywood, Calif.



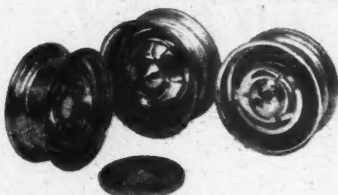
ALUMINUM FLYWHEELS

Cast of aluminum and heat treated, flywheels are stock dimensions, 1/2 weight. Machined for closest tolerances. \$39.50 most makes. Wil-Cap Company, 10215-cc S. San Pedro Street, Los Angeles 3, California.

REVERSED CHROMED WHEELS

The ultimate rod or custom touch!

14- or 15-inch stock wheels are entirely disassembled for heavy chrome plating, thoroughly buffed, accurately aligned and reassembled to stock or reverse by riveting or welding...



RIVETED (EACH) \$22.50 EXCHANGE

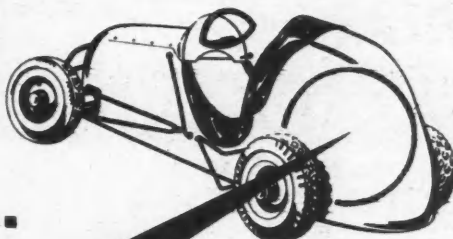
WELDED (EACH) \$24.75 EXCHANGE

FULLY GUARANTEED

F.O.B. GARDENA, CALIFORNIA

APPLIANCE PLATING CO., Dept. C-6 • 1719 W. Rosecrans, Gardena, Calif.

Heart of the Finest QUARTER MIDGET RACERS...



...CONTINENTAL RED SEAL POWER

Continental Red Seal air-cooled engines power more than 95% of all quarter-midget racers today. Manufacturers and Do-it-yourself fans agree, Connie power is tops. . . . NEW ACCESSORIES: Continental now offers a series of specially designed Connie racing parts, to give the extra boost it takes to win. They include new heavy-duty forged aluminum rods with quick-replaceable copper-lead liners, special heavy-duty 6:1 reduction gear, high lift cam, and a new lightweight flywheel with steel hub insert. See your Continental dealer for a complete list.

BUILD YOUR OWN QUARTER MIDGET RACER

—HERE'S HOW—

Complete plans for a Quarter Midget racer are now ready. Send \$1.50 check or Money Order to:
Continental Motors Corp., Dept. D,
12800 Kercheval, Detroit 15, Mich.

YOUR CONNIE RUNS BETTER WITH



GENUINE CONTINENTAL
RED SEAL PARTS

Continental Motors Corporation

AIR-COOLED INDUSTRIAL ENGINE DIVISION
12800 KERCHEVAL AVENUE • DETROIT 15, MICHIGAN

GET YOUR MILLARKEY

SWEAT SHIRTS & T-SHIRTS

5 BRILLIANT COLORS

LONG SLEEVE

\$5.50

SHORT SLEEVE

\$3.50

ANY DESIGN



PLEASE
INCLUDE
SIZE



The ORIGINAL BLOW-OFF Decal



MILLAR

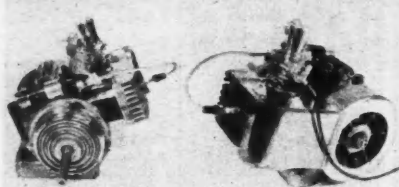
SHEET OF 5 \$1.00
P. O. BOX 667

CC-8

LOMITA, CALIFORNIA

IF YOU'VE HEARD OF THE PART — — — WE HAVE IT!

Don't waste valuable time searching for that hard-to-find item. We have it! Over 300 RACING PARTS and supplies for Quarter Midget engines are listed in our new catalog. We stock the sensational new Italian Dellorto racing carburetor, McHal helmets, etc.—and our own famous Steen C chemical lubricant. A valuable FREE Gift Certificate is sent with every catalog—our way of saying "Thanks for your interest!"



Modified Continental Engine for Quarter Midgets

STEEN'S
POWER PARTS

NEW CATALOG

Our new catalog sent by return mail, please enclose 25c for postage and handling.

19 EAST VALLEY BLVD. ALHAMBRA, CALIFORNIA

SHIFT FASTER

... with a Tornado Kit you can convert from column shift to the world's fastest floor shift!

Easy-to-install Tornado Conversion Kits contain complete linkage as shown. Everything you need to connect your transmission is right there... plus simple installation instructions.

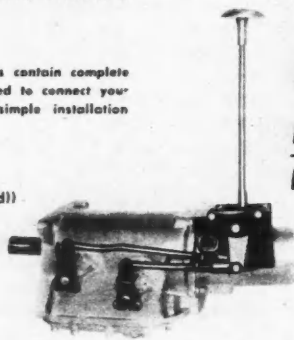
Available for these cars:
(unless rear trans housing is altered)

1939-48 Cad & LaSalle
1939-59 Ford & Merc
1958-59 Pontiac
1949-59 Chev
1949-50 Olds

Kits for other cars to be announced soon.

How to Order: Specify year and model car, also if overdrive or not. Enclose \$7.50 deposit (balance c.o.d.).

WRITE DEPT. C-8 Lee's SPEED SHOP 1143 E. 14TH ST. OAKLAND 6, CALIFORNIA



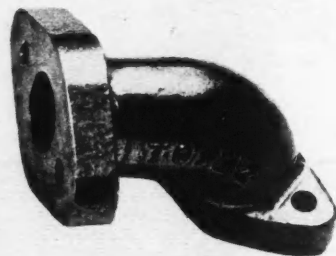
Rev.	2nd
\$34.95 including shift lever and knob	
L.O.B. Oakland, Calif. Shog. weight 7 lbs.	
Low	High

**RUGGED...
HEAVY DUTY!**

Tornado Kits
have standard
shift pattern.

Note:
Kits won't fit automatic
transmissions.

CC shops



CONTINENTAL MANIFOLD

Accommodating either X* or X* venturied Amal carburetor, this flange puts float bowl vertically rather than on an angle. \$5.95 each. Topaz Equipment Co., P.O. Box 1185-cc, Redondo Beach, California.



TUBULAR GRILLE

Stainless steel, tube grille fits '55-'59 Chevy, '52-'59 Ford, '55-'56 Plymouth. Brackets included. \$20.00. Detroit Grille, 258-cc E. Vernor St., Detroit 1, Michigan.



CART CLUTCH

Automatic clutch is sprocket-type. Is easily installed on engine for direct drive to wheel. No chain lash, completely automatic. For prices, see local cart dealer.

"The material you have in your book of Hot Rodding is the most complete and authentic I have seen."

Anyone interested in Hot Rodding should have these facts in this great book at their side."

—AK
MILLER



THE COMPLETE BOOK OF HOT RODDING

"COMPLETE" is truly the word to describe this amazing book. For beginners and seasoned Hot Rodders, from basic theory to the latest in techniques, **THE COMPLETE BOOK OF HOT RODDING** covers the entire field in detail. Authored by automotive magazine publisher Robert E. Petersen and the editors of Hot Rod Magazine, this master reference is certain to provide you with scores of ideas YOU CAN USE.

**OVER 200 PAGES OF THE
MOST EXCITING HOT ROD-
DING MATERIAL EVER COM-
PILED IN ONE VOLUME!**

THE HOT ROD STORY—Learn how the sport of hot rodding actually began. Here is the history of its development, obstacles which blocked its growth.

HOT RODDERS TACKLE THE WORLD'S ENGINES

—How veteran hot rod enthusiasts get more power. An invaluable checklist of primary facts.

THE TRUE FACTS ABOUT HORSEPOWER—In this chapter, learn how the terms torque and horsepower are determined, applied to your car.

GETTING MORE HORSEPOWER FROM YOUR ENGINE—Facts on boring & stroking, porting, over-size valves, reground camshafts, valve springs.

YOUR ENGINE'S VALVES—Here's how to disassemble, inspect, recondition, adjust. Information on servicing valves for better breathing.

THE COMPLETE STORY OF ENGINE CARBURETION—Insure your engine's idling well and running smoothly with good torque output at low engine speeds.

YOUR ENGINE'S ELECTRICAL SYSTEM—High-performance ignition, mags, distributors, coils, condensers, spark plugs, batteries, generators.

ENGINE BALANCING—Here's how hot rodders who want top performance put the rotating parts of their engines in perfect balance.

FACTS ON HIGHER COMPRESSION—Improve performance thru higher compression ratios. Full information on high octane fuels.

THE PROS AND CONS OF FUEL INJECTION

—The latest developments. Power and economy aspects versus carburetor-type fuel systems.

SUPERCHARGING FOR INCREASED PERFORMANCE—How much more power can you expect from supercharging? This chapter tells all.

ENGINE SWAPPING FOR MORE POWER—Given here are methods of installing bigger engines that will save you time and money.

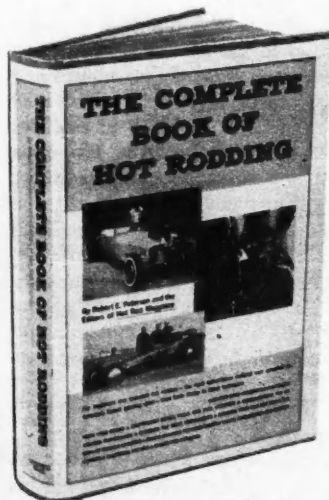
CHOOSING THE RIGHT TRANSMISSION—Discusses transmissions for the various types of cars used by hot rodders for all types of driving.

BUILDING YOUR OWN HOT ROD—Choosing the basic car. Chassis, body, suspension modifications. Building for street or competition, or both.

THE ABC'S OF TROUBLE SHOOTING—Every major engine malfunction problem is discussed in detail, complete with photos and illustrations.

RACING TIRE PROBLEMS—The 5 "musts": correct tread design; outside diameter; air pressure; balance and weight; maintenance.

PLUS A THOROUGH ALPHABETICAL INDEX AND SPECIAL GLOSSARY OF ALL THE BASIC TECHNICAL TERMS



CLOTHBOUND • HUNDREDS OF PICTURES • ORDER NOW

PETERSEN PUBLISHING CO. DEPT. CC-4
5959 Hollywood Blvd., Los Angeles 28, Calif.

224 pages

\$5.95

postpaid

CLIP
AND
MAIL
TODAY!

Enclosed is \$_____, @ \$5.95 each postpaid. Please send me _____ copies of **THE COMPLETE BOOK OF HOT RODDING**.

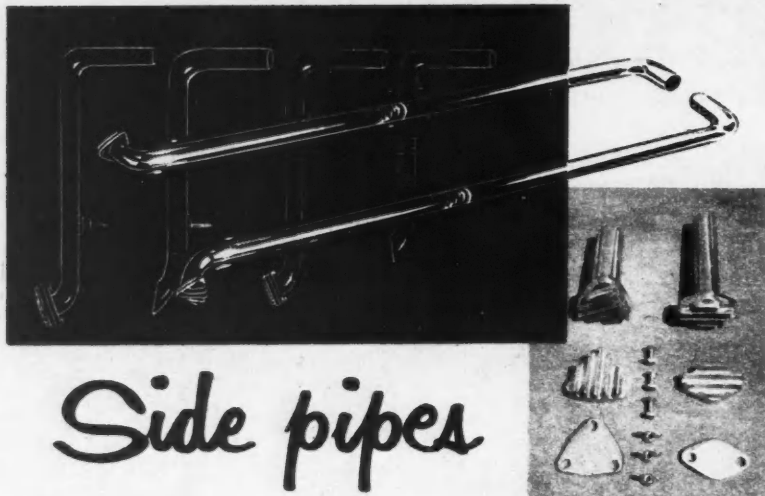
NAME _____

ADDRESS _____

CITY _____

ZONE _____

STATE _____



Side pipes



SEND LARGE
SELF-AD-
DRESSED
STAMPED EN-
VELOPE FOR
COMPLETE IN-
FORMATION TO:

SERVICE CENTER

15729 S. Atlantic • CC-8 • Compton, California

"The Connetti" MONZA

3 HP Continental engine, swing-axle front with coil springs, genuine naugahyde upholstery, full carpeting, racing windshield, automatic clutch and internal expansion brakes combined with Italian styling and American engineering & dependability, make the Connetti "MONZA" the safest, smartest junior sports car in the world. Completely assembled, ready for road or track.

THE FINEST 2 PASSENGER
1/4 SPORTS CAR MADE! **\$395⁰⁰**

MODEL 3008 f.o.b. our plant



Send for our Free illustrated color brochure

EXCLUSIVE FRANCHISED DEALERSHIPS AVAILABLE

CHARCON, INC.,

DEPT. CC8C, 7137 LAUREL CANYON, NORTH HOLLYWOOD, CALIF.
PO Box 5-0411

THE LATEST AND BEST CUSTOM GRILLES

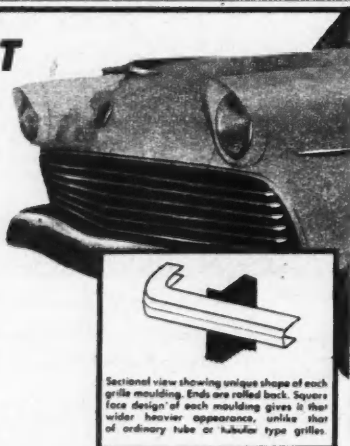
Our own special design will add distinction and individuality to the front end of your CHEVROLET, FORD or PLYMOUTH.

- RUST PROOF
- STAINLESS STEEL
- DESIGNED FOR PERFECT FIT
- EASY INSTALLATION
- ASSEMBLED READY TO INSTALL
- INCLUDES ALL BRACKETS
- SUPERB STYLING
- ATTRACTIVE PRICE
- UNCONDITIONALLY GUARANTEED

ALL ONE PRICE **\$20⁰⁰** CHEV. 1955-59
FORD 1952-59
Each PLY. 1955-56

All of our products are guaranteed 100%. We produce numerous other custom grilles and bars. Send 10c for our illustrated catalog sheet. 20% deposit required with all orders. Balance C.O.D. Canadian orders please mail full amount plus \$1.00 for additional handling.

DETROIT GRILLE MFG. CO. CC-8 258 E. Verner, Detroit 1, Mich.



Sectional view showing unique shape of each grille moulding. Ends are rolled back. Squares face design of each moulding gives it that wider heavier appearance, unlike that of ordinary tube or tubular type grilles.

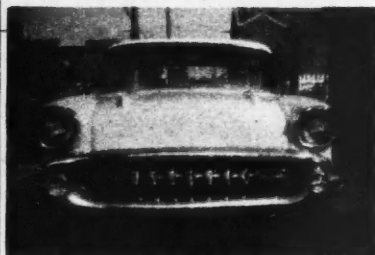
LETTERS

'57 CHEVY IDEA

Dear Sir:

In your April edition of Car Craft I was very interested in your article on "adapting '58 Buick grilles."

Enclosed is a picture of my '57 Chevy with a '55 DeSoto grille. The



adapting of this grille was very easy.

Thought you might be interested in this idea. Possibly it will help other readers.

—Charles Van Walker
St. Louis, Mo.

Very nice, Charles. I'm sure many readers will be interested. Notice you've also peaked your hood ridges.—Ed.

CANDY COLOR COMPLIMENT

Dear Sir:

I am writing this letter for two reasons. First I would like to compliment you on your informative articles. I was especially interested in your article on painting with "Candy Colors" which appeared in the February 1959 issue. I am planning on doing some minor scalloping with "Candy Colors" on my car fairly soon. Your article will come in very handy.

The second reason is that I would be proud to see a picture of my car in your magazine. I have enclosed some pictures to show you what it looks like. It is nosed and decked. I have lowered the front end four inches by cutting three coils from my front springs and the rear is lowered two inches by the use of lowering blocks, thus giving it a small rake. Up front I have installed a 1951 Mercury grille. It has a dual exhaust system and a pair of Olds Starfire hubcaps. To complete the exterior it has a five-coat Hawthorn Green enamel paint job.

The panels are upholstered in white leatherette, which matches the white on my white and green cut-to-fit seat covers. Since I had my car

CAR CRAFT



painted, I learned to spray paint myself, so I painted all the interior moldings to match the exterior finish.

Up to now my engine is stock, however I plan to install a Chev V8. From what I have seen and heard it will really get up and go.

—David Dwyer
Scituate, Mass.

Yes, Dave, go it should. Very glad to know that we'll be helpful when it comes time to scold your Ford. That's what we're striving for.—Ed.

KING-SIZE CAR CRAFT

Dear Sir:

Being a long time subscriber to CAR CRAFT magazine, I was filled with mixed emotions when I received my July '59 issue in the mail. Mixed emotions, because I have always favored your small size mag and thought it was continually the best. However, you can't fight size—and those extra large photographs.

Regarding your July issue, I see that CAR CRAFT has scooped the field with coverage on Tiago's wild Ranchero. Also your national comparison coverage on show-cars from East to West (Autorama—Roadster Show) was the best yet.

Once again, CAR CRAFT leads the way.

—Ed Johnson
San Francisco, Calif.

Thanks for the compliments, Car Craft also finds Eastern and Midwestern cars more than just interesting. In the future it will be pretty difficult to define whether a given street-rod or custom car is a product of the East or the West.

COVERAGE BY CITIES

Dear Sir:

I subscribe to your magazine and think it is great. You often devote a whole issue to '32, '34 and '40 Fords, etc. Then, you also do a feature on a club. Well why not try and do a feature of just one city in California, like San Diego, San Francisco, etc.? This could continue throughout the following issues with different cities.

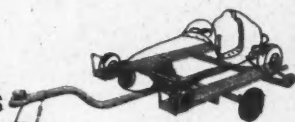
—Bob Furlong,
Milwaukee 9, Calif.

Possibly, a coverage such as this could be worked out. Thanks Bob, for the idea.—Ed.

AUGUST, 1959

DADS... KIDS... a new trailer for your 1/4 Midget Racer or car. All steel construction, with pneumatic tires... Roller bearing high speed wheels... Heavy duty leaf springs... Really lightweight. Makes hauling your racer convenient and safe! No heavy lifting; just roll it on... roll it off... and leave your car on the trailer when not in use! Easy to store and maneuver... New low price, complete \$89.50

1
MIDGET TRAILERS
4



Hitch also available for your car, Dad! Standard model—\$12.95 and Chrome model—\$16.95. Please give year and make of your car. Trailers available for 1/4 midgets; 1/4's tandem or overhead.

MIDGET TRAILER SPECIALTIES COMPANY • SO. EL MONTE, CALIFORNIA

Fill out coupon and mail...

MIDGET TRAILER SPECIALTIES COMPANY
P.O. BOX 9361, SO. EL MONTE, CALIFORNIA

☐ Check, money order for \$89.50 enclosed, 1 pay freight.
☐ 25% deposit (\$22.50) enclosed. Balance C.O.D. 1 pay freight.
☐ Standard hitch (\$12.95) ☐ Chrome hitch (\$16.95) Check enclosed.

On _____ Year _____

Please send more information on trailers

NAME _____ ADDRESS _____ CITY _____ STATE _____

FINEST CLUB PLAQUES IN THE NATION

CUSTOM DESIGNED FOR YOUR CLUB!

- Heavy, 3-D aluminum or brass castings.
- Many stock designs for individual orders.
- Complete service, polishing, painting, drilling, mounts.
- Free literature.

SEND 25¢ TODAY

For complete catalog on Emblems, Jackets, Decals, Plaques, Novelties—including information on how to start your club.

Stylized **EMBLEM COMPANY**

1072-C No. Wilton Pl., Hollywood 38, Calif.

The Luther Daytona Viper

The DAYTONA VIPER is a Premium quality car.
No other car can match these Features:

- SUSPENSION:** Fully Suspended—adjustable Torsion Bars at all four wheels.
- ENGINE MOUNT:** Floating Engine Mount. Maintains constant chain tension.
- FRAME:** Chrome Moly Tubular Frame-rails with truss construction for greater strength and stability.
- BRAKE:** Foot Brake standard—unique design using automotive brake lining. Hand brake optional.
- BODY:** One-piece Fiber Glass body. Steel belly pan welded to frame.
- UPHOLSTERY:** Custom upholstery with Foam Rubber padding.
- WHEEL BASE:** 47"—the best on asphalt or clay tracks.
- STEERING WHEEL:** Custom fabricated neoprene covered.
- TREAD:** 30" front—30 or 32" rear.
- WEIGHT:** 155 lbs. optimum weight-horsepower ratio.

DEALER
INQUIRIES
INVITED



Also
Luther

Gear Boxes
Cylinder Heads
Flywheels
Breathers
Chrome Moly
Sun Gears
Valve Kits
Ball Bearing
Adaptors
Etc.
**CONTINENTAL
DISTRIBUTOR**

\$595⁰⁰

COMPLETE CAR—NO EXTRAS TO BUY

Roll bar and external parts chromed. Truly America's Finest Quarter Midget—in design—in construction—in performance. OUR TESTING GROUND IS THE RACE TRACK IN COMPETITION. Write today for information... 1/4 and 1/2 midget cars and a complete line of engine accessories.

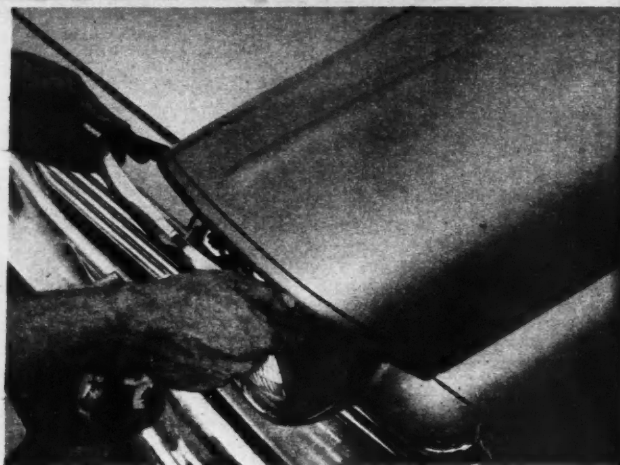
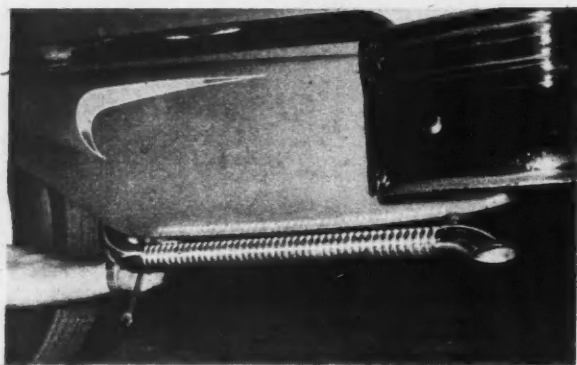
LUTHER ENGINEERING

JOHN LUTHER

HOWARD PECK

TALLY BYARS

6 Esther Street
Dept. CC-8
RYan 1-8197
Pasadena, Calif.



eight accessories and
a '57 Ford—the
easy way to
basic customizing
on a limited
budget

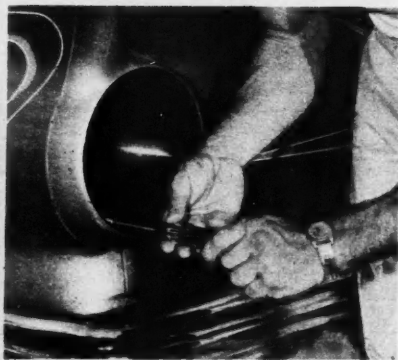
\$100 CUSTOM



THE PAGES OF CAR CRAFT magazine as a rule are not excerpts from an economics textbook. Nevertheless, there is a large contingent of individuals who do not realize how much they can restyle a car with only \$100.00 worth of parts. Hence, the lesson in economics.

Every enthusiast is interested in inexpensive customizing. The answer can be found in the accessory field. In the last two years, the accessory manufacturing business has come alive with new restyling products. Many are designed for a particular make and model, while others are universal and can be adapted to any automobile. These new accessory items are a far cry from the gaudy, flashy gee-gaw bolt-on items of bygone days. Today, leading accessory manufacturers not only concentrate closely on duplicating various adopted customizing styles, but they also have initiated many ideas of their own which have met wide acceptance by the customizers. Tubular





straight bar grilles, plastic taillights, stylish headlight rims, decorative striping and scallops, color chrome, and Candy Paints are just a few of the timely accessory items and materials available at your local automobile accessory store. Therefore, it is possible for a wise young man to purchase one hundred dollar's worth of these various products and customize a car quite thoroughly.

To support this statement, *CAR CRAFT* magazine decided to build a

project car in just such a manner. Collaborating with Barris Kustom City, who performed the work, California Custom Accessories, 1807 West 65th Street, Los Angeles 47, California, and Service Center, 15729 S. Atlantic Blvd., Compton, California, who supplied the accessories, and Marvin Lee, auto dealer, who supplied the '57 Ford—the end result of the accessory type custom work was very satisfying.

Although we selected the '57 Ford

for our introduction article of the "\$100 Customs," other makes and models are now being prepared with a similar investment for expenses. They will be forthcoming in near future issues.

Neatly detailed, an accessory-customized car is just as capable of winning the class trophy for semi-customs as any car. With this thought in mind, and clutching our \$100, let's customize the '57 Ford.

CONTINUED

\$100 CUSTOM

T A I L L I G H T



Following instructions in kit, assemble "Sattel-Lite" taillight replacement unit.



Important step in procedure is to add small spacer to each attaching bolt.

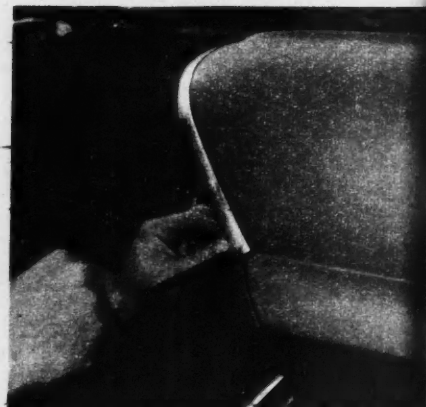


Pictures above show finished Ford Coupe was completely stock except for a nose and deck job; these are not included in the price list and are purely optional items, as they were altered before present work.

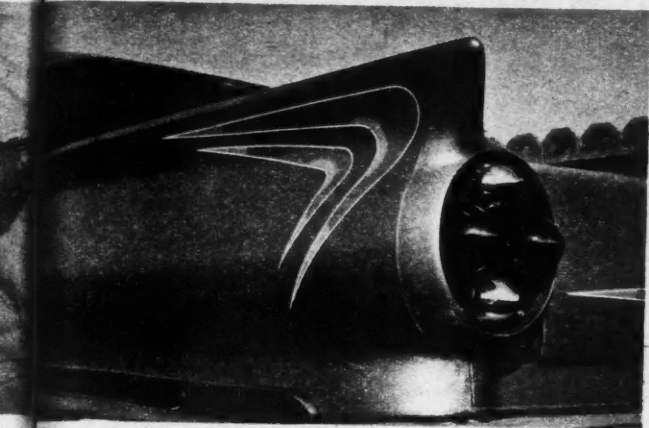
H E A D L I G H T



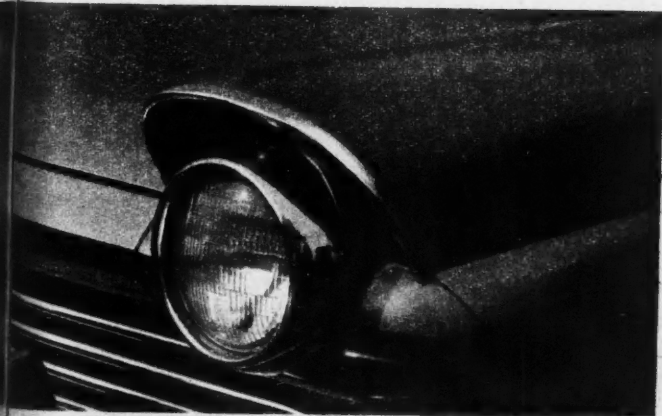
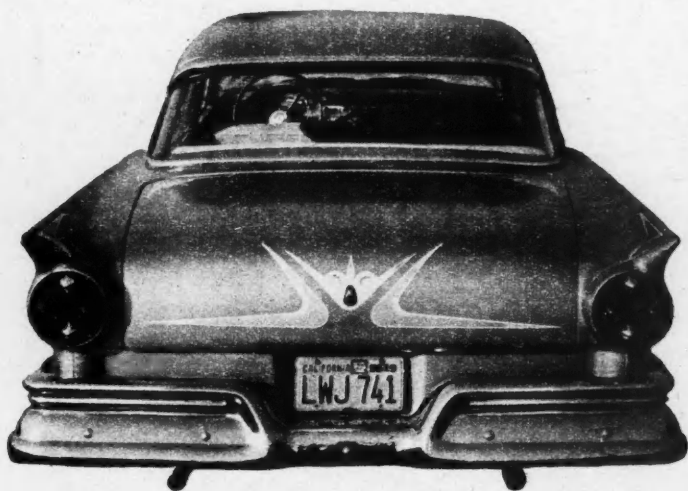
Drill small holes for screw at bottom of each side. Use self-tapping screws.



Check rim for proper alignment and attach. Chrome trim name is "brow."



Completed installation illustrates accessory lens kit with dual red plastic bubbles and with twin chrome bullets.



With brow trim in place, bolt accessory chromed headlight ring into position; ring and brow are simple bolt-on items.

AUGUST, 1959

GRILLE



Following removal of stock grille, bolt together tube bars and brackets in kit.



Vertical bracket is installed in grille cavity; brackets are supplied with kit.



Final step is to install grille. Note how park light is repositioned behind grille.

CONTINUED

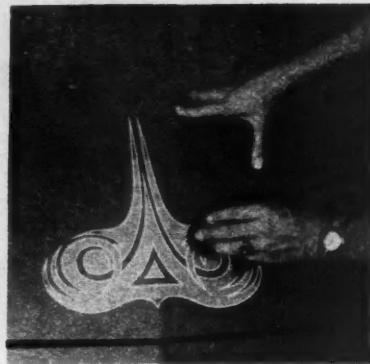
SCALLOP



Easy to apply decal scallops have full set of directions. Cut out, then ...



...soak in water to loosen. When decal feels slippery, remove it from paper.



Apply decal to car, remove air bubbles. Surface must be absolutely free of dirt.

\$100 CUSTOM

PRICE LIST

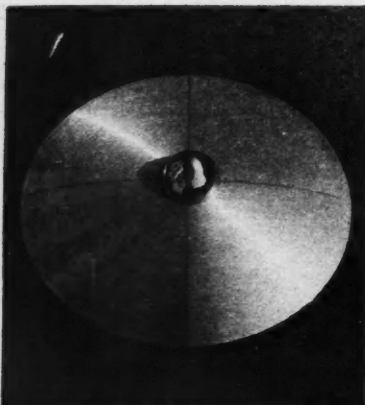
Tubular Grille	\$29.95
Satel-Lite Kit	14.95
Headlight Ring	4.95
Headlight 'Brow'	3.95
Bullet Kit	3.95
Kolor Krome	1.95
'Moon' Hubcaps	14.95
Scallop Decals	4.95
Exhaust Extensions	19.90
TOTAL	\$99.50



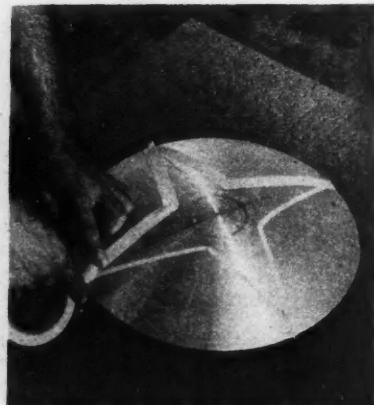
HUBCAP



Divide the cap into four equal sections, with hole drilled in center for bullet.



Bullet is mounted by bolting it to cap; attachments are provided with bullets.



Mark off sections that will be color chromed with pencil and masking tape.



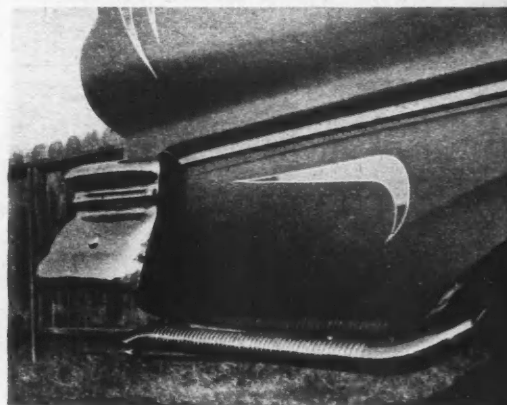
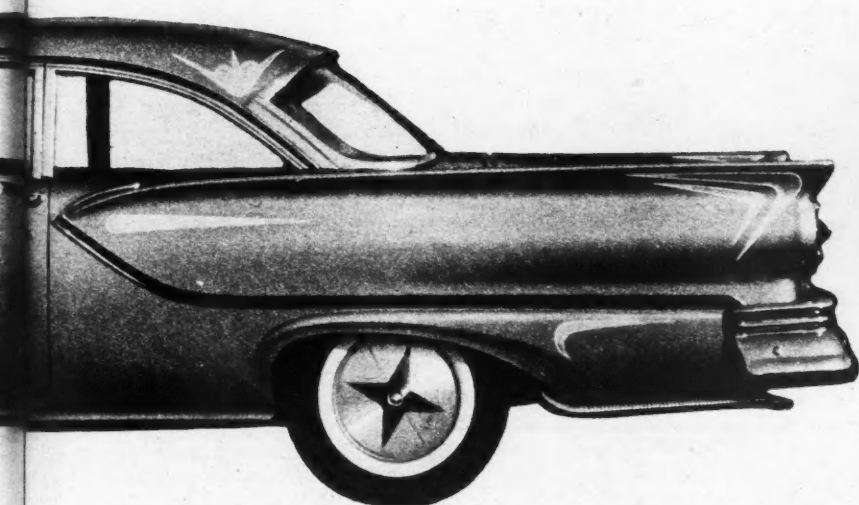
Two attaching bolts must be welded to pipe. Then, add rubber spacers to bolts.



Using vise-grips, pull down inner lip of fender to provide attaching surface.



Measure distance between bolts, mark and center punch. Then, drill the holes.



Installed exhaust pipe extension is of rib type. Rubber spacers protect chrome.

Side pose reveals placement of decal scallops, personalized "Moon" aluminum hubcaps, and exhaust extensions. Many decal variations are available to thrifty customizers with imagination.



Mask-off areas not painted. Cap is now sprayed following directions on the can.

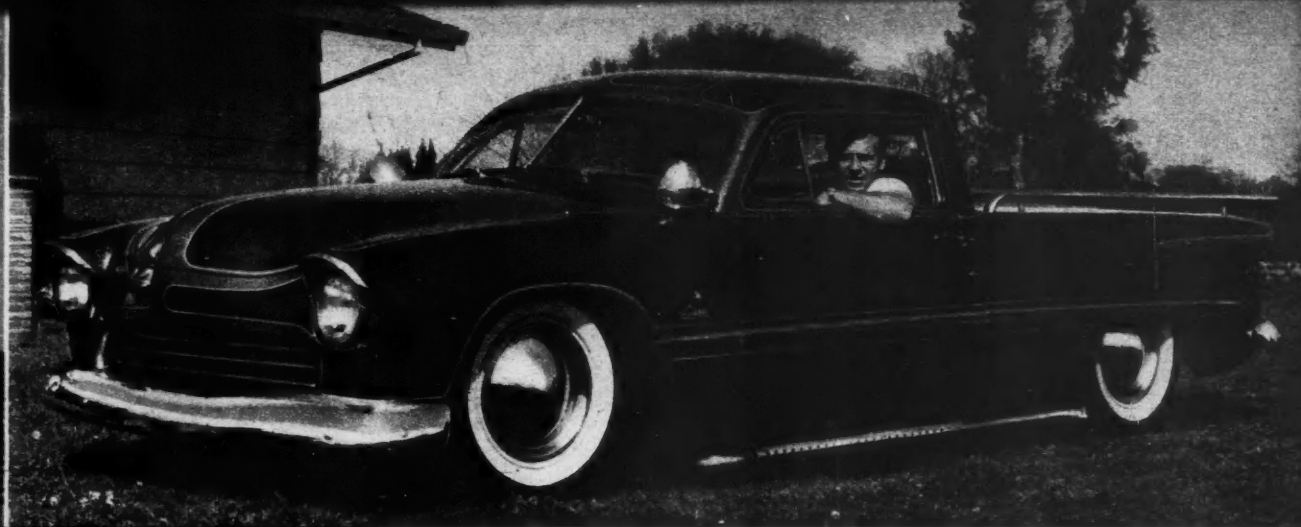


Completed project illustrates personalized hubcap. The spun aluminum disc is dressed-up with chromed bullet, color chromed design, and accenting stripes.

For SHOP 'N KICKS



*That's the way bodysman, Dick Green,
on plums has been fully restored pickup.*



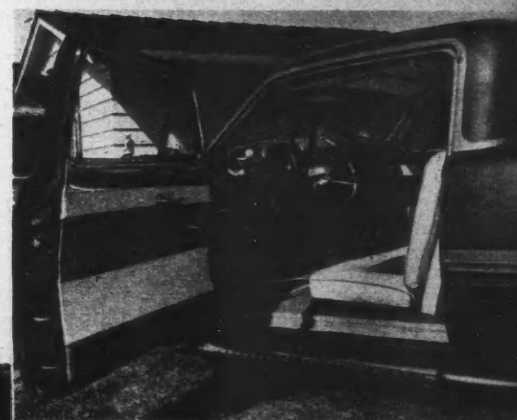
Dick Gregg of Sacramento, California, converted his '50 Ford sedan to a pick-up to use as a rolling advertisement for his body shop. He did all the work.

Three chrome bars float in grille cavity formed with tubing. Pancaked hood has corners rounded, blends with five inch section job and the chopped top.

Ford's windsplit is cleverly worked in to a hood for '54 Pontiac taillight lens on the converted "bed." Exhaust pipes run the full length of the bed.

Special built seat, doors and panels, are covered in gold and white Naugahyde. Large bullet is adapted to the steering wheel. Note guards on pipes.

Gate-less bed has frenched shroud over license plate. Plywood, covered with Naugahyde, serves as tarp. Lacquer paint is Sunburst and Copperlust.



Vim and Vigor



With 24 extra horses – Volkswagen's four-barrel packs a punch

THERE ARE MANY PERSONS who have suspected as much but now it has been proven that there isn't anything with four wheels that escapes the notice of hot rodders. This eager and ingenious group has made practically every make of automobile manufactured in the United States respond to its attention and now many of its members are directing their efforts toward imported cars. It doesn't seem to make any difference to them that a large percentage of cars imported into this country are small economy models that are bought by people who are interested more in transportation and fuel mileage than they are in acceleration and speed.

The very purpose for which small cars of foreign manufacture were designed would seem to make the application of hot rodding methods to their engines at cross-purposes to their reason for existence. However, many of these miniature power plants have been reworked in degrees that range from minor to all-out

to make the cars in which they are installed perform better. The latest of the little chuggers to join the club is the Volkswagen.

Volkswagen is rapidly becoming the nation's most popular imported car. In fact, it has probably already attained this distinction. A junior version of the Porsche, which without doubt is one of the finest small cars in the world, the Volkswagen has attained its stature in the imported field by being outstandingly practical from the standpoints of reliability, operating expense, quality, and driving ease.

Volkswagen engines built in 1956 and later have a cylinder displacement of 72.74 cubic inches. This displacement is stuffed into four cylinders that have a bore of 3.031 inches and a piston stroke of 2.520 inches. Early engines of this displacement have a compression ratio of 6.10 to 1 and later versions have a ratio of 6.60 to 1. These ratios enable the engines to operate satisfactorily on fuels that have octane ratings between 74 and 80.

for the VW



By Don Francisco

Photos by Francisco, Medley, Creitz

Compared to the compression ratios of 10 and 10% to 1 in current domestic engines and the 100 plus octane fuels now available, these compression ratios and their fuel requirements are almost primitive. However, it must be remembered that the fuels available in West Germany, where Volkswagens are built, are not nearly as high in quality as those available to Yankee motorists. From an economy standpoint the Volkswagen fuel requirement is another point in the car's favor because the octane ratings of our lowest priced grades of gasoline far exceeds its demands.

The engines are horizontally opposed and built around a cast-magnesium crankcase. Two individual cylinders of grey cast iron bolt to each side of the case. Each pair of cylinders has its own light-alloy cylinder head that has combustion chambers of a modified hemispherical shape. Intake and exhaust valves are in the heads and they are actuated by rocker arms. Push-rods and solid valve lifters, actuated by a camshaft supported in bearings below the crankshaft, actuate the rocker arms. The engines are air-cooled and, as a point of interest, they weigh only 198 pounds, ready to run. The horsepower rating of engines that have the 6.10 to 1 compression ratio is 31 at 3700 rpm and the rating of engines that have the 6.60 to 1 ratio is 36 at 3700 rpm.

Some of the more popular pieces of special equipment available in the Los Angeles area for VW engines are Okrasa cylinder heads, Judson rotary vane superchargers, Weber stroker kits, and various reground camshafts.

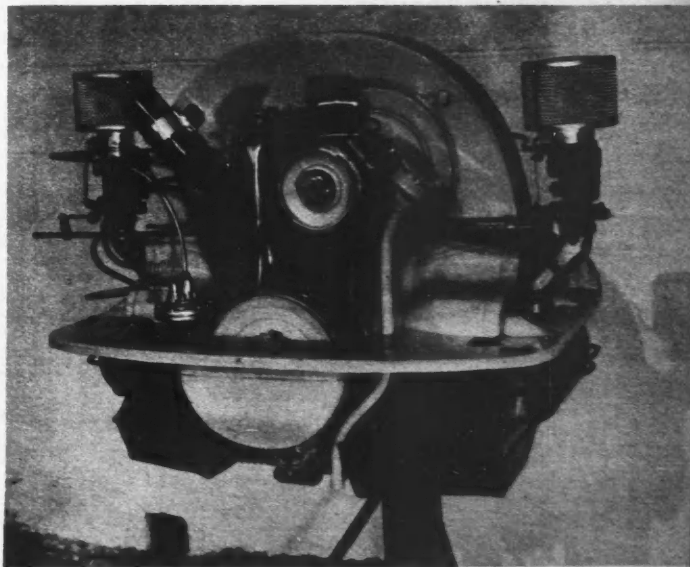
Okrasa heads are made in Germany. They were designed originally for European customers who wanted to rework their stock VW's for racing. They are of aluminum alloy and they provide a compression ratio of 7.5 to 1 on a stock displacement engine. They have an intake port for each cylinder and oversize intake valves. Stock VW heads have one port for the two cylinders on each side of the engine. Each of the intake ports in Okrasa heads is larger in diameter than the single port in stock heads. Okrasa intake valves are 1.250-inch in diameter, compared to the 1.100-inch diameter of stock valves. Okrasa exhaust valves have the same head diameters as stock valves. In the kits supplied with the heads are two Solex carburetors made originally for Porsche engines, special air cleaners, throttle linkage, a fuel line for the two carburetors, and all the nuts and bolts required to install the heads and carburetors on the engine.

Superchargers are becoming more and more popular for road engines of all makes. The Judson blower made for VW engines is a small, compact unit that uses the

stock VW carburetor and intake manifold. It is driven by two narrow V-belts by means of a special pulley that bolts to the engine's crankshaft.

Weber stroker kits are designed around special crankshafts manufactured by Harry Weber, owner of Weber Tool Company in Los Angeles. Harry is a hot rodder from way back and these crankshafts are only one of the many engine conversion parts his company manufactures. The shafts are nodular-iron castings and they are available with strokes $\frac{1}{8}$ -inch and $\frac{1}{4}$ -inch longer than standard. They differ from stock cranks in that the arms between their main bearings and crankpins are full circles. They have main bearing journals and crankpins of standard diameters but ground to the small side of the factory tolerance to provide the maximum clearance allowed by stock specifications. The shafts are dynamically balanced in Weber's shop.

(Continued on following page)



VW engine with dual carburetors on special intake manifold. This engine was built by ex-midget race driver Norm Holtcamp, who now is a VW and Porsche specialist in the L.A. area. Dual carburetion by itself doesn't help a VW too much because of restriction created by engine's small intake parts.

Vim and Vigor for the VW

Pistons in the kits are made by JE Engineering, Alhambra, California, and in top center position in the cylinders the top surface of their heads is the same distance from the top of the cylinders as the tops of the heads of the pistons in a stock engine. They use stock piston pins and have grooves for a $\frac{3}{16}$ -inch oil ring and two $\frac{3}{32}$ -inch compression rings—Grant rings are supplied in the kits. Also in the kits are reworked connecting rods, new connecting rod bearing inserts and a $\frac{1}{2}$ or full-race grind camshaft.

The connecting rods are reworked by grinding the sides of their big-ends that are parallel to the crankpins, the webs on the outer circumference of their caps, and chamfering the heads of their cap bolts. This reworking is necessary to prevent the lower ends of the rods from hitting the inner surfaces of the crankcase as the rods are rotated by the special crankshaft. Due to the longer stroke, the rod big-ends follow paths of larger diameter than normal and there isn't sufficient clearance in the cases for this greater range of movement unless the rods are altered.

Another possible point of interference in the engine as a result of the longer stroke is between the connect-

ing rods and some of the lobes on the camshaft. Clearance at these points is adequate for a quarter-inch shaft but when a half-inch shaft is installed it becomes necessary to install a camshaft that has smaller cams. This means that the stock camshaft must be reground. Weber can supply camshafts ground for this purpose. Valve timing provided by these shafts with running valve clearance is as follows: Intake valve opens 30 degrees before TDC, intake valve closes 71 degrees after BDC, exhaust valve opens 71 degrees BBC, exhaust valve closes 30 degrees ATC. Valve lift is .300-inch. Lash setting is .006-inch for all valves. Valve timing provided by a stock camshaft, with .040-inch valve lash, is as follows: Intake valve opens 2 degrees 30 minutes before TDC, intake valve closes 37 degrees 30 minutes ABC, exhaust valve opens 37 degrees 30 minutes BBC, exhaust valve closes 2 degrees 30 minutes ATC. Valve lift is .293-inch. Lash for all valves is .004-inch, cold.

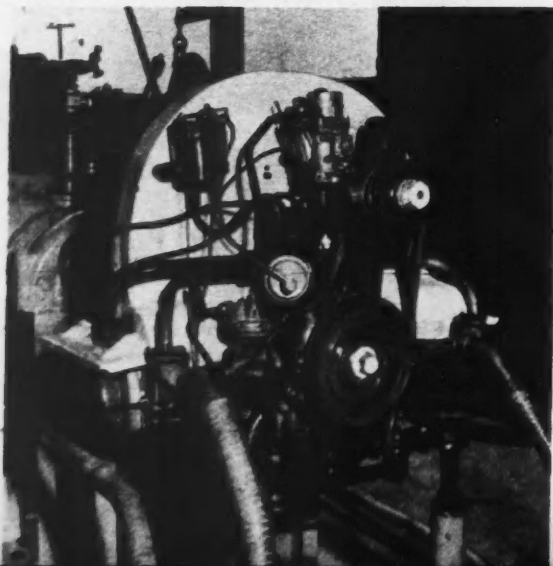
Weber's stroked cranks and the other parts in his stroker kits may be bought separately if one so desires. Old parts—connecting rods and camshaft—may be traded in for credit on the new parts. Prices of the kits are \$237.50 for a half-inch shaft and \$199.50 for a quarter-inch shaft, with

your connecting rods and camshaft in exchange. Crankshafts, alone, are \$125.00. Weber will install either of the crankshaft and rod assemblies in your crankcase for \$30.00. This would be money well spent because you would be sure that the installation was correct and that points of interference in the case had been taken care of correctly.

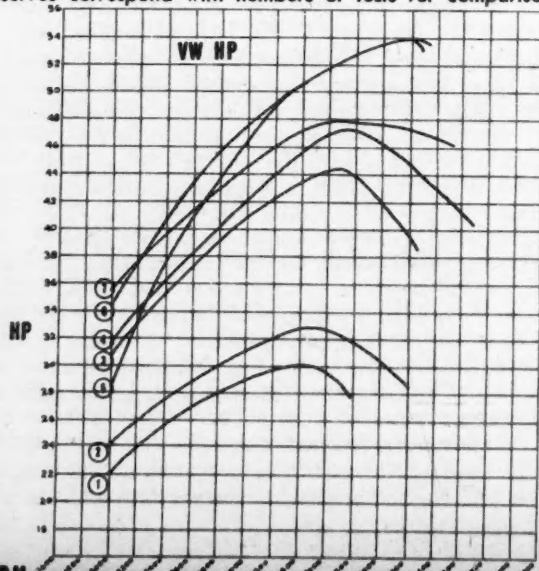
Installation of a stroker kit in an otherwise standard engine or one fitted with an Okrasa kit is fairly simple. The crankshaft, reworked connecting rods, and the pistons are installed in exactly the same manner as stock parts. The only special work that must be done involves either machining $\frac{1}{8}$ -inch from the lower ends of the cylinders or grinding $\frac{1}{8}$ -inch deep slots in the ends of the cylinders in line with the connecting rods to provide clearance for the upper ends of the rod cap bolts and the areas around them. Slots for this purpose must be slightly wider than the rod big-ends.

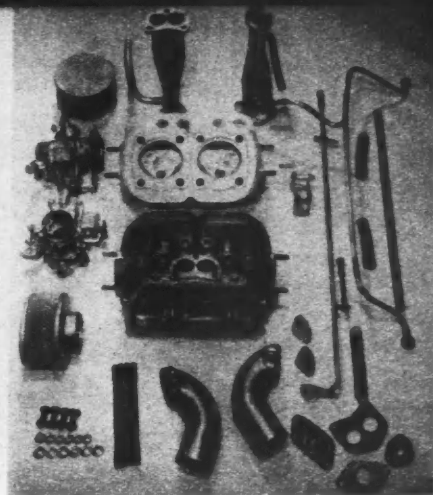
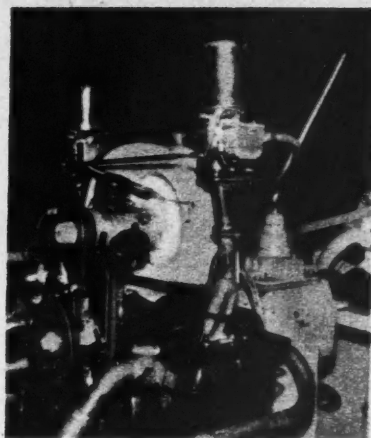
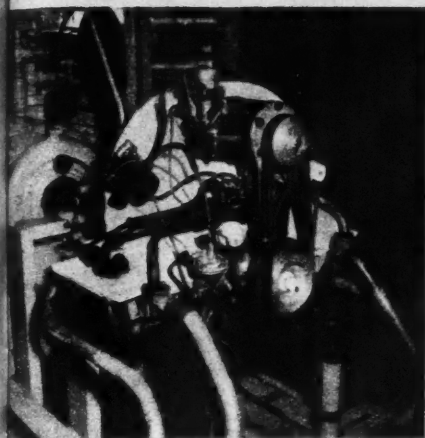
It's possible to use stock pistons with a quarter-inch crank but when this is done special spacers equal in thickness to one-half the stroke increase must be installed between the crankcase and the cylinders. These spacers move the cylinders away from the crankshaft so that when the

VW engine on Weber's dynamometer for its preliminary test. Horsepower and torque figures obtained on this test were used as base figures for all of the subsequent tests.



On this graph are the horsepower curves for each of the dynamometer runs described in the text. Numbers on the curves correspond with numbers of tests for comparison.





pistons are at top dead center in the cylinders their heads will be the same distance from the top surfaces of the cylinders that they were with the stock crankshaft. The skirts of stock pistons used for such installations must be shortened an amount equal to one-half the stroke increase to prevent their striking the crankshaft when they are in bottom center position in the cylinders. There is an ample range of adjustment in the valve lash adjusting screws in the rocker arms to compensate for the distance the cylinders are moved away from the crankcase by the spacers.

Actually, Weber crankshafts don't lengthen the stroke a full $\frac{1}{4}$ or $\frac{1}{2}$ -inch. A quarter-inch shaft lengthens the stroke to 2.750 inches which is an in-

crease of .230-inch instead of the .250-inch of a full quarter, and a half-inch crank lengthens the stroke to 3.00 inches, which is an increase of .480-inch instead of the .500-inch of a full half. With cylinders of stock diameter, a quarter-inch shaft increases an engine's displacement from its stock 72.73 cubic inches to 79.36 inches, and a half-inch shaft increases the displacement to 86.58 inches.

Increasing the piston displacement of any engine automatically raises its compression ratio if the pistons rise to the same height in relation to the top surfaces of the cylinders that they did originally and if the combustion chambers in the cylinder heads aren't altered in any way. In engines that have a standard compression ratio of 6.10 to 1, a quarter-inch shaft raises

the ratio to 6.56 to 1, and a half-inch shaft raises the ratio to 7.07 to 1. In engines that have a standard ratio of 6.60 to 1, a quarter-inch shaft raises the ratio to 7.11 to 1 and a half-inch shaft raises it to 7.66. The smaller combustion chambers in Okrasa cylinder heads raise the ratio of engines with both standard ratios to 7.50 to 1. With a quarter-inch shaft the ratio jumps to 8.09 to 1, and with a half-inch shaft it is 8.73 to 1.

There are two ways to determine the value of special engine equipment. One of these is by installing the equipment on an engine in a car and then conducting performance tests with the car. The other is to install the equipment on an engine and then measure the engine's torque

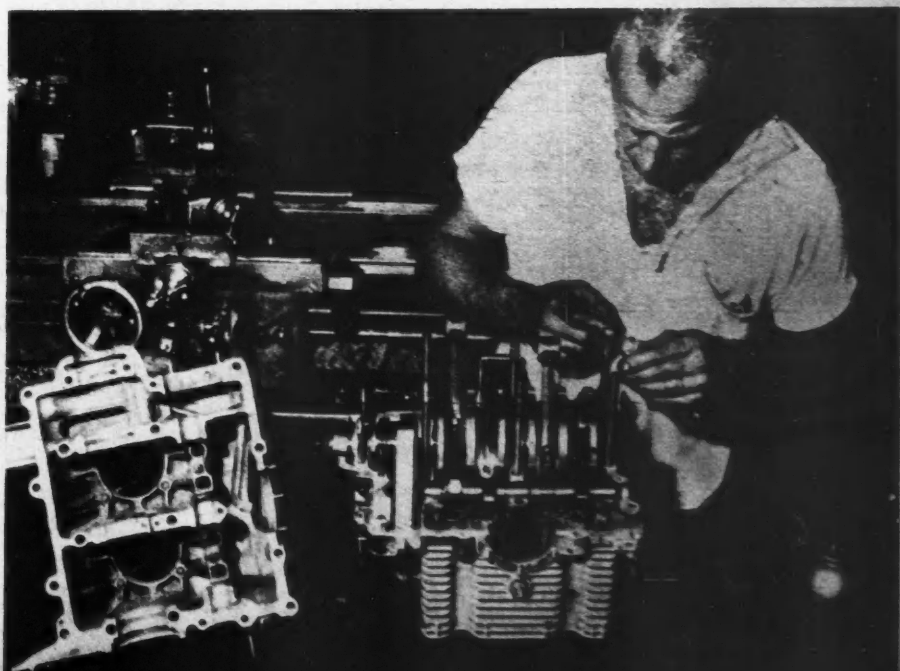
(Continued on page 56)

ABOVE, LEFT • Stroked VW engine fitted with vane-type Judson supercharger, as it was set up during test number five.

ABOVE CENTER • Engine fitted with Okrasa cylinder heads and dual Stromberg 81 carbs. Adaptors were necessary between carbs, Okrasa manifolds.

ABOVE, RIGHT • Pictured above are complete parts supplied with Okrasa kit. In addition to high compression cylinder heads are two Porsche carbs.

RIGHT • Johnny Price, of Weber Tool Co., Los Angeles, installing one of Weber's stroker kits in a VW crankcase assembly. Care must be taken during this part of job to eliminate points of interference of rotating parts and case.



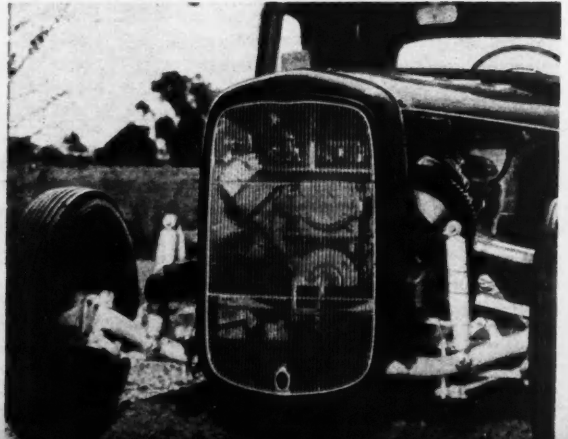
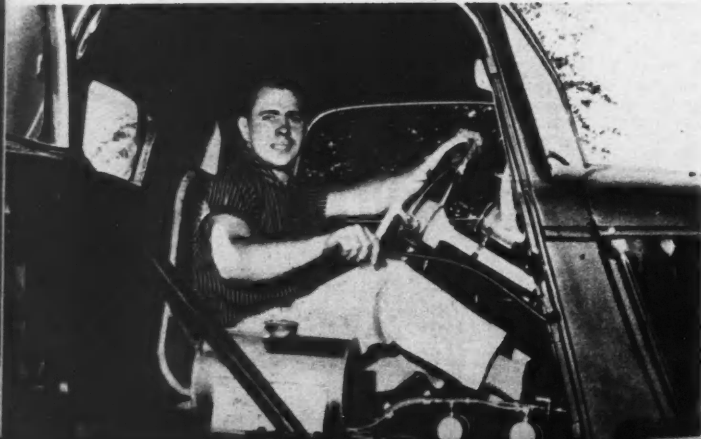


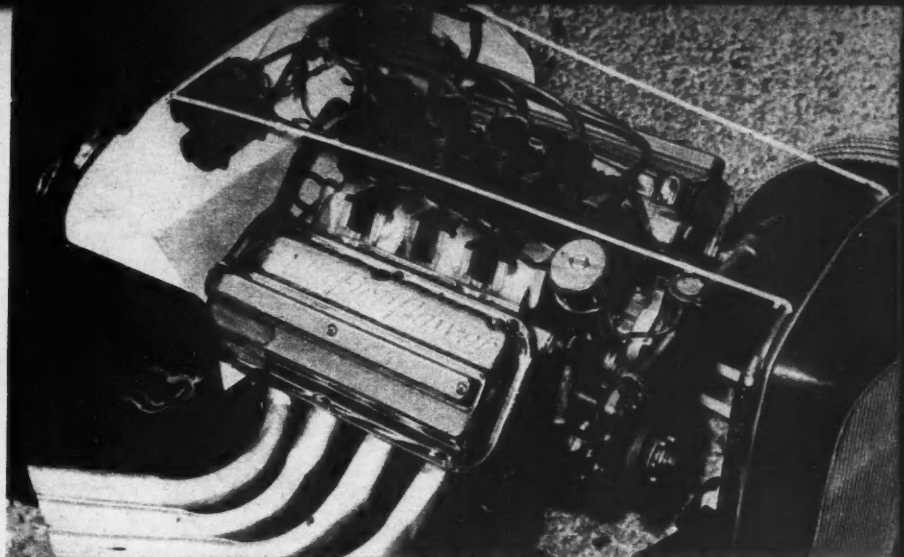
CLEAN and COMPETITIVE

At drags or auto shows—Orville Mueller's '34 Coupe is a top contender

Owner and builder Orville Mueller of Millstadt, Illinois, demonstrates draggin' position in 'steel upholstered' cockpit. Mueller had help of Cluster Busters in construction.

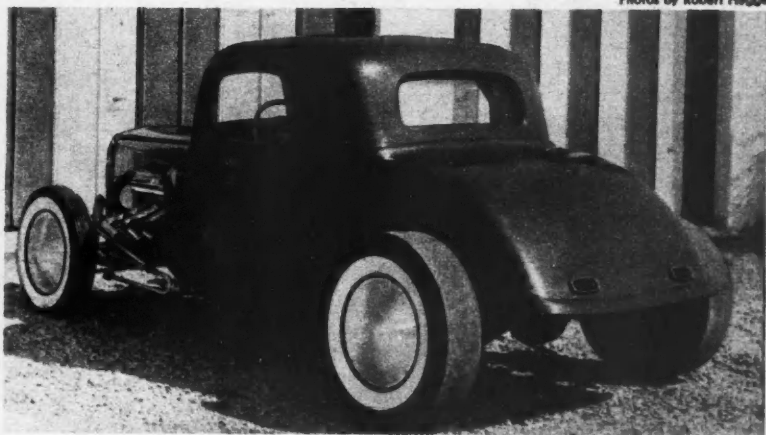
'34 Ford chassis has transverse front spring, special tube axle constructed of 2" diameter, $\frac{1}{4}$ " wall steel tubing. For shock absorbing, Mueller used Monroe units, no front brakes.





As nice as they come, '34 Ford is powered by potent Chrysler engine. Fire breathing apparatus includes: four '97" carbs on Weiland manifold, Isky camshaft, '56 Chrysler "300" pistons, heads with 10:1 compression ratio. '52 Chrysler also has been bored to 3¹⁵/₁₆", ports and heads are polished. The ear-splitting exhaust system is constructed of boiler pipes, "tuned" to a deafening blast.

Photos by Robert Heape

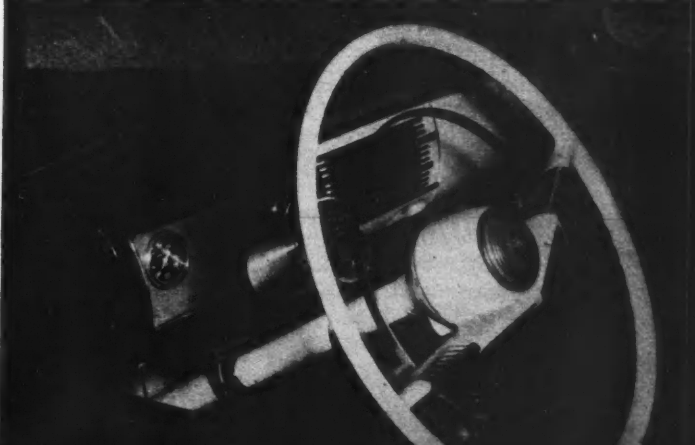
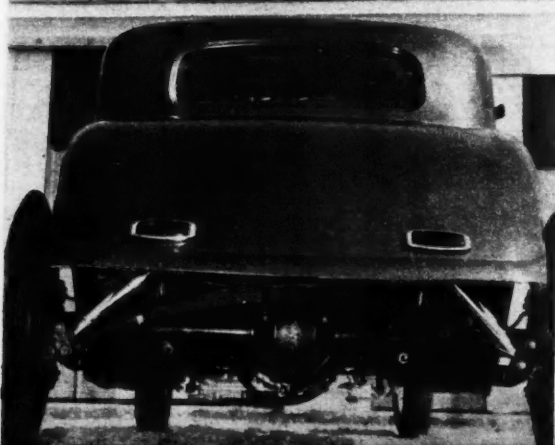


Fenderless coupe has been channeled 8" in front, 10" in rear. Top was smoothed over, is solid instead of fabric. '32 Ford grille was adapted to front of 6" extended '34 Ford hood, liberally louvered, sprayed Dust Plum lacquer.

Looking 'neath filled trunk, '48 Ford rear suspension and differential are seen; Monroe Super shocks are run. Locked rear end 4.44:1 ratio, combined with 7.60 x 15 slick tires.

Immaculate coupe has been clocked in quarter mile strip at 110 miles per hour, loaded Mueller's mantle with 8 trophies won at car shows. Drags are only place where Mueller runs Ford, hence no headlights, front brakes, or upholstery seen.

Tachometer mounted on steering column, gives accurate readings for snap-shifts with '37 LaSalle trans; 11" International clutch is used. '40 Ford dash has oil, water gauges.





"...Something smashed against my hand and the steering wheel with the force of a sledge hammer...I had to get the car back on course!"

ILLUSTRATION BY KARL HUBENTHAL



"MY FASTEST RIDE"

By MICKEY THOMPSON as told to DON FRANCISCO

THE ONLY THING I had to indicate how fast I was traveling was the needle on my car's tachometer. The mountains alongside the salt bed were too far away to be of any help and the black guide line I was following just stretched on ahead of my car disappearing into a shimmering haze. A quick computation, as I checked the tach, told me I was approaching 250 miles an hour.

My mind was going around faster than the wheels on my car as all the things that could happen to louse up this leg of my first record attempt were running through it. And then a thing that had never entered my mind happened—something smashed against my hands and fingers with the force of a sledge hammer. The blow forced the wheel enough to make the car veer slightly to the right, if any turn can be slight at 250 miles an hour. At first I didn't know what had happened. Taking my eyes off the course the car was following for just an instant I saw that the hinge that held the front edge of the Plexiglas cockpit canopy to the body had been torn from its screws. Air pressure had smashed the canopy against my hands and the steering wheel.

The pain in my hands was bad as I fought to remove the canopy away from the steering wheel but it wasn't nearly as bad as the thought of missing the trap and blowing this whole

record run. I knew that if I could hold the canopy away from the wheel with my left hand I could steer the car back onto the course with my right. The only trouble was that when I tried to move the canopy I found the air pressure against it to be almost unbelievable. The canopy felt as if it were still bolted to the car. Screws that projected through it dug even deeper into my hands as I gradually forced it away from the wheel. All I could think about was getting the car back on the course. At the speed the car was traveling, I didn't have much time.

Very little effort was required to steer the car once the wheel was free. It responded perfectly as I guided it back onto the black line. From here on all I had to do was hold it on the course.

Six months before the opening date of the Bonneville Trials my car had been nothing more than a bunch of ideas. I had a few of the parts I would need for it but most of the parts would have to be made to fit the car's specifications. The car's primary purpose was to be for drag racing but in the back of my mind I also had visions of running it at Bonneville.

When my crew and I had left home over a week before, the plan had been to run three or four days at Bonneville and then move on to Oklahoma City and the National

Drags. If we had followed our plan we would have been in Oklahoma City on this particular day. But here we were, going for the record on the salt with a car built originally, believe it or not, for drag racing! The reason we were still at Bonneville was that we couldn't turn our backs on the high speeds we were running and the opportunity to establish a new all-time speed record for the Bonneville Speed Trials, which also is a record for American-built automobiles. The Nationals could wait.

Ever since I had run my dual-engined coupe at almost 200 miles an hour at Bonneville I'd thought that a streamliner that had a smaller frontal area than the streamliners that were running on the salt would go much faster than those cars had been capable of turning. For this reason, the frontal area of my new car was uppermost in my mind during the car's construction. A minimum frontal area was made possible by narrowing the front axle assembly to give the front wheels a tread of 50½ inches. Something I had learned through experience was that a dragster's rear wheels must be close together if their tires are to get maximum traction and the car is to handle well. Accordingly, the car's rear axle was narrowed to provide a tread of 40 inches.

One feature of the car that makes
(Continued on following page)

MY FASTEST RIDE



it radically different from the average dragster is its four-wheel drive. Also, it has two engines, which isn't unusual now, but one engine drives the rear wheels and the other drives the front wheels. The rear axle assembly is a Ford straddle-mount type fitted with a quick-change center section and the front assembly is a similar unit fitted with Willys steering knuckles and driving joints. Both engines are Chrysler V8's. Reason for my choice of the Chrysler powerplants is that it can't be denied that Chryslers are mighty potent engines for the type of car I was building.

Six months spare time isn't much for a project of this type and I never would have made Bonneville if it hadn't been for the help of Cecil Schrimp, who worked day and night with me when time was growing short and Fred Voigt who helped me assemble and prepare the engines. Cliff Collins and Shell Hoyt, of Harman and Collins in Los Angeles, gave me a great deal of help with engineering details and other problems.

Cliff let me use his dynamometer room for many, many weeks and he worked out all the engineering problems for the four-wheel drive setup.

Most of the fellows who run streamliners at Bonneville have been competing on the salt for years. They have slowly raised their speeds to where most of them are running from 250 to 266 miles an hour. I've known most of them for several years and the reception they gave me and my car was anything but cold. They all had something to say about one or more of the car's features. Their comments on its four-wheel drive, its narrow front and rear treads, and the fact that its front engine is connected directly to the front axle's pinion shaft and that the rear engine has a transmission were normal ones.

Comments on the car's partially covered front wheels were to the effect that such construction would cost us several miles an hour. However, we had a definite reason for leaving the sides of the wheels exposed. This was to reduce the car's

frontal area approximately 120 square inches. Some of the other comments on the car's solid front and rear suspension were quite strong. What they amounted to was that I was out of my mind to run the car at any speed in its unsprung condition.

I think the biggest bomb we dropped among the competition was our declaration that we were going to run 250 miles an hour on pump gasoline. The response to this was definitely negative. We were told that we would be a long time working our speed up to our expectations. This was from men who had spent anywhere from five to ten years trying to reach such a speed on alcohol and nitro fuels. But what our critics did not know was that our car had already turned 175 miles an hour on pump gasoline on a course only slightly longer than a quarter of a mile. That our expectations weren't too far out of line was proven by our first run, on which our speed was 241 miles an hour. This speed gave my crew and me much pleasure and I think it shook a lot of the other streamliner owners quite badly.

The competitive feeling a guy gets at Bonneville is one-of-a-kind. Competing against hot rodding's best car builders and mechanics, needless to say, is a real challenge. And here I was cinched in the cramped cockpit of a car basically designed for drag racing attempting to make the dream of my life a reality. Everything had gone as planned for this record run—except for the canopy that tore into my left hand. Our down run of 265 miles an hour came off as scheduled. But it was obvious that I had lost time in getting the car back on the course on this return run. Mashing the throttle harder I felt the pressure of the engines and the forward surge of the car. A quick glance at the tach indicated my speed to be 268 miles an hour. My mind was wild with only one thought—"hang on, and go!" The five mile return marker came into sight and left. Then the four... the three... the timing stand... and I was out of the traps. Only as I started my deceleration did I feel the sting in my left hand from the metal screws protruding through the canopy. Even then my thoughts only concerned the results of the two way average. I

294 mph...we figured we had it made!

didn't have to wait long for an answer. As I halted the car just out from the starter's stand the expressions of the guys I had known for years and fellow participants told the story—"we were in!"

True, we hadn't cranked on as anticipated, only bettering the previous record by a slight margin of the clocks, but we had accomplished our goal and had the top time of the '58 Bonneville Trials all wrapped up with a two way average of 266.8 miles an hour. With the meet's best time in the bag—the crew and I could now look forward to what was left of the week in letting it all hang out for a try at boosting the record—and a shot at that 300 mark. The car was capable, I was sure of that, all we needed was a touch of lady luck.

On our first run the following morning we changed the fuel for both engines to 33% percent nitro, 10 percent benzol, and the balance alcohol. Voigt pushed me off and I was halfway to the first timing light before I realized the car wasn't geared high enough for the power the engines were putting out. All I could do was run the engines up to the maximum rpm their camshafts would allow them to turn without floating the valves. Our speed on this run was 286 miles an hour. This qualified us for another record attempt.

We didn't get to make our second record attempt until the following morning. We ran the same fuel mixture but we raised the gear ratio in both axles. I ran up to the rpm limit of the camshafts again on the down run and clocked 294 miles an hour. We figured we had it made. For the return run we raised the gear ratio another tooth but while we were working on the car we found more oil in its belly pan than should have been there. This was a sad indication that something was wrong in one of the engines. The oil seemed to be coming from the front engine so we dropped the percentage of nitro in the front engine's fuel tank to approximately thirty percent and boosted the nitro in the tank for the rear engine to forty percent.

At this time one of the engines in the car belonged to me and the other one belonged to Voigt. As it happened, the front engine was Voigt's.

But because he's the kind of guy he is, he made me promise before he pushed me off on the return run that I would stay on the throttle if either of the engines started to fail and not lift until the engine gave up completely. I nodded that I'd do as he said and when he pushed me off the return starting line I was set to go all the way.

It wasn't until the car had accelerated to maximum engine rpm that I sensed something was wrong. A quick look at the oil pressure gauges showed that pressure was dropping in Voigt's engine. According to the tachometer the car was running well over 300 miles an hour so I left the throttle on the floor and hoped the engine would stay together until I got through the trap. But luck wasn't with us on this run. I suddenly felt, rather than heard, the result of what could politely be called a serious malfunction in the engine compartment.

Two rods had broken in the front engine. Parts of the rods had continued to rotate with the crankshaft and had completely wiped out the rest of the engine. Everything was gone. Cliff Collins' steel billet camshaft was bent so badly that we had to pry it out of the block.

I had hated to destroy the engine but after making my agreement with Voigt I'd had to stay on the throttle because he would never have spoken to me again if I'd feathered off. The same thing would have applied if it had been my engine that had lost its oil pressure. It was the same kind of a shake a guy gets at Vegas: We were gambling an engine against the possibility of setting a new record that we wouldn't have had to worry about until the following year and we lost. But everything worked out all right because our previous record held for the rest of the meet.

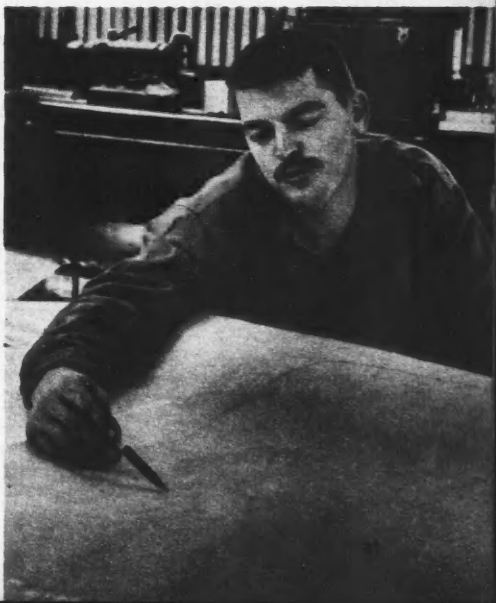
I don't know whether it was because I hadn't driven at Bonneville for three or four years or if it was just the excitement of being on the salt again but that first, 241 mile an hour run late Monday night is the one that stands out in my mind as our most satisfactory run of the meet. This is true despite the fact that it was on this run that the car's right rear tire threw its tread. This proved to be just the beginning of quite a bit



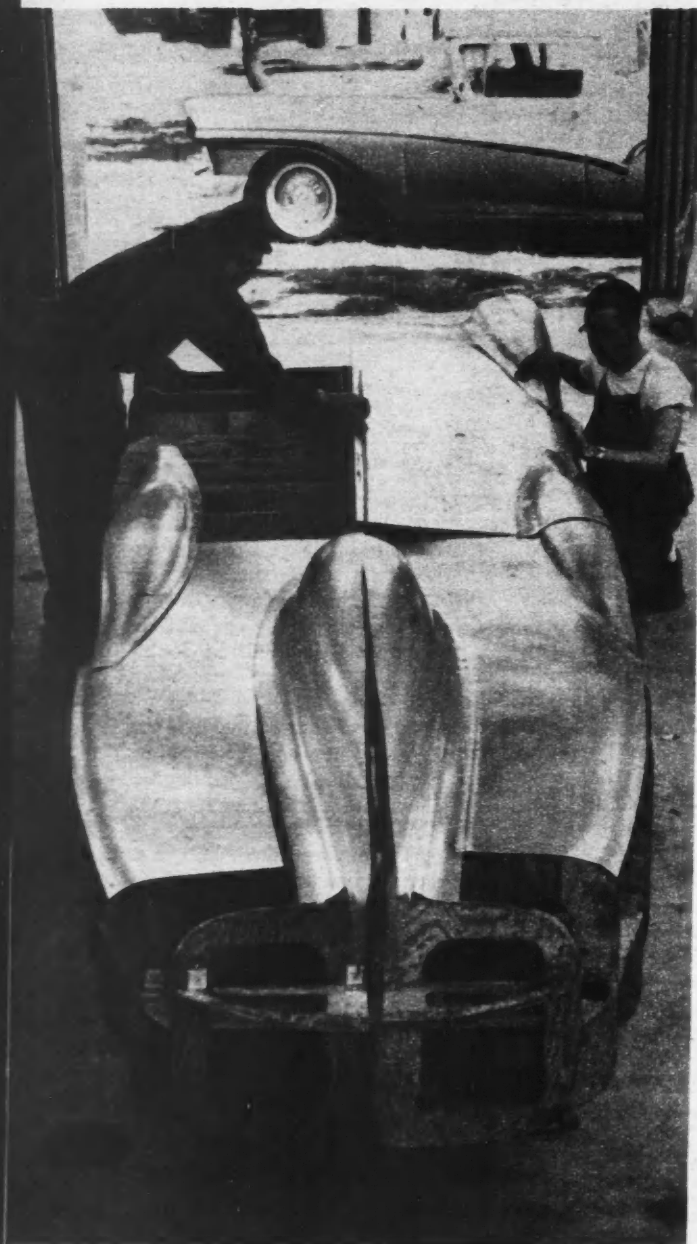
of tire trouble that we had throughout the week, all on the right rear wheel. When the tire lost its tread it vibrated and shook the car and me so badly that I had blurred double vision until the car lost most of its speed.

On our second run, which was early Tuesday morning, the fuel injector pump on one of the engines soured and the resulting lean mixture sunk the heads of four pistons. Replacing the pistons killed the rest of that day but our first run the following day was an easy 251 miles an hour. This was on pump gasoline and it exceeded our declared goal by one mile an hour. Several of the other

(Continued on following page)



"MY FASTEST RIDE"



Photos by Collin Creitz

From wooden mock-up, Mickey and Don Borth form aluminum skin for this year's new streamliner. The finished shell will be some nineteen and a half feet long; eight feet shorter than John Cobb's car which now holds fastest automotive record of 394 miles per hour established in 1947. Sleek new streamliner will be powered with four Pontiac engines mounted in the center of the car. Two engines will face forward driving rear wheels, while front engines will be reversed driving the front wheels. Each engine drives thru separate 3-speed LaSalle transmission, Cyclone quick-change center section is featured; final drive ratio 1.3:1.

streamliner owners had made a point during the two days we had been running to sniff the fuel in our tanks from time to time to make sure we were still running gasoline. We were.

Now that I can look back at the busy week we spent on the salt I'm sure that we could have broken the old record of 266 miles an hour on gasoline. The thing that fouled us up was time. When we saw we were beginning to run short of time we got frantic, and when you get frantic at Bonneville you dump more nitro into the fuel tank. That's just what we did.

Our second run on Wednesday boosted us up to the higher speed bracket. Changing from gasoline to thirty percent nitro and seventy percent alcohol for the front engine jumped our speed to 272 miles an hour, which was approximately six miles an hour over the old record. This qualified us for a record attempt. It was on the return leg of this record attempt that the cockpit canopy broke loose from the body.

Losing the engine was the last of several mechanical failures we had during the week. However, with the exception of the tires and the canopy, all the failures were in the engines and their accessories. In addition to the fuel pump that gave up and the pistons that collapsed as a result, we broke all the main caps in the front engine on one run. It was after this happened that we installed our spare engine owned by Voigt.

We were extremely happy that we didn't have any of the usual breakage of chassis components that plague many cars of this type. I credit ninety-five percent of this to the fact that we abused the car badly on the LADS drag strip that I manage at Long Beach before we took it to Bonneville. During the drag strip shake-down we had several failures, including an axle, a universal joint, and many other things. The torturous acceleration of drag racing is much more severe on a car than the high speed runs at Bonneville. Another thing we had worked out on the drag strip were changes to the oiling system in the front engine, which was reversed in the chassis, so that none of the engine's bearings would be starved for oil at any time.

One problem we had that none of us had even thought about before we left home was with the gear assemblies in the driving axles. To run at the speeds we were turning it was necessary for the pinion gears in the axle assemblies to rotate at nearly 11,000 rpm. Engineers say that 8,000 rpm is the absolute maximum for gears of this type. The gears didn't give us any actual trouble but if we made two consecutive runs the rear differential housing would get so hot that I couldn't lay my legs against it. Once the car started to accelerate, the housing got hot fast. This made things a little uncomfortable because the car's cockpit position made it necessary for me to straddle the housing.

I know the car will run 300 miles an hour with its present gear setup because I was there. Every time we raised the gear ratio the car went faster, but I don't think it would have gone much faster than 315 miles an hour without melting the pinion gear teeth.

One thing that we missed very badly, and we knew we were missing it but we just didn't have time to do anything about it, was underhood pressure. This would

tires were our biggest problem...we lost tread off several.

have acted like a supercharger by forcing air into the engines but I was afraid to boost the pressure too much because the hood wasn't secured to the car as well as it should have been. Had the hood been fastened more securely and the fuel injectors and the rest of the engine set up for more pressure, I'm sure the car would have been capable of even higher speeds, within its mechanical limitations.

Tires were our biggest problem. We lost the tread off several of them, although we made only nine runs during the week. The baffling thing about the tire problem was that all our failures were on the right rear wheel. Representatives of the company that manufactured the tires gave us terrific cooperation while we were at Bonneville but they were unable to stop the failures.

Many different ideas were voiced as to why the tires were losing their tread. The tire people believed that the centrifugal force created by the high car speeds we were running was responsible. I didn't think that was the answer because centrifugal force was acting equally on all the tires. If centrifugal force had been the cause, it seems that failure would have occurred on other wheels as well as the right rear.

My theory was that the rate of acceleration, which was fierce once the car got under way and both engines started pulling, was literally peeling the tread from the fabric of the tire's carcass. Normally, the right rear wheel is lifted by pinion torque on heavy acceleration but when quick-change gears are used pinion torque reaction is reversed and the lift is exerted on the left wheel, which loads the right wheel heavier than the left. In a passenger car the wheel that is lifted has a tendency to spin because of the differential action in the axle assembly but with a locked differential, such as we had, both wheels rotate at the same speed.

Engine torque reaction normally increases the weight on the right side of the frame but in our car rear engine torque was counteracted by the torque from the front engine, which was rotating in the opposite direction.

Among the things we tried in our attempts to stop the tire trouble was raising the inflation pressure of the tires from approximately 80 to 120

pounds. We were going to use even higher pressures until we realized that the pressure was starting to bow the magnesium wheels on which the tires were mounted. Replacing the original 6.00 x 18 rear tires with large diameter 7.50 x 18's seemed to help but it was far from a cure.

After the first tire threw its tread the tire people told me they were sure a carcass wouldn't fail immediately after losing its rubber. They assured me I would be able to run at least the three miles it would take to stop the car before wearing through the fabric to the tube. Actually, the rubber of the tread doesn't contribute any strength to the tire. Its main purpose is to prevent the fabric from coming in contact with the surface on which the tire is rolling. But even after this reassurance I was more than a little concerned whenever the rubber started flying.

On one run, when I was trying to qualify for a record attempt and I had to finish the run because Chet Herbert's car had already qualified, I lost a tread while going into the last mile. I had to stay with the car for another two miles to complete the run. With the commotion caused by the pieces of tread banging against the body, the vibration created in the car by the tire, and wondering whether the fabric of the carcass would wear through and let the tube blow before I could get stopped, I had plenty to worry about. After the car finally came to a stop we found that only two of the tire's fabric plies had been worn through. The six remaining plies left an ample safety factor against a blowout.

The tire trouble created a double problem. It was lousing up our runs and could put a damper on my plans for '59. Details for a new, 400 mile an hour car were already running through my mind but if I couldn't keep tires on a car at 300 miles an hour, what was I going to do at 400 miles an hour?

After returning to my home, I took my tire problem to another manu-

facturer. The manufacturer promised to go all-out to try to perfect a tire that will stand up at the speeds I expect to run with the new car this year. This particular company has a lot of new ideas they have incorporated in tires for jet airplanes. Their jet tires have been used successfully at speeds up to 300 miles an hour.

Loads on the jet tires are probably six or seven times greater than loads the tires on my new car will have to carry but there will be a difference between the two applications. On a plane the tires are subjected to braking forces only but we're going to transmit power to them. However, after watching a few jets land I think we will be much easier on the tires than they are.

One problem we may have with the new car that people usually don't associate with Bonneville is getting it stopped. This problem will apply only to return record runs. There isn't anything to worry about on the down runs because if something should happen to the brakes the car could keep rolling until it sunk into the soft salt that borders the bed. But on return runs there isn't as much room to play with because of the highway that passes through one end of the salt bed.

This year, on the return leg of our 286 mile an hour record run, I stopped the car in three miles. To do this I had to downshift and use all the brakes I had. Sparks flying off the brakes made them look like small meteors. When the car finally stop-

(Continued on page 52)

Goodyear Tire and Rubber Co. developed special high speed tires for Mickey's Land Speed Record attempt this year. Specially designed wheel covers by Moon secure to Halibrand wheels.



Flip-Top



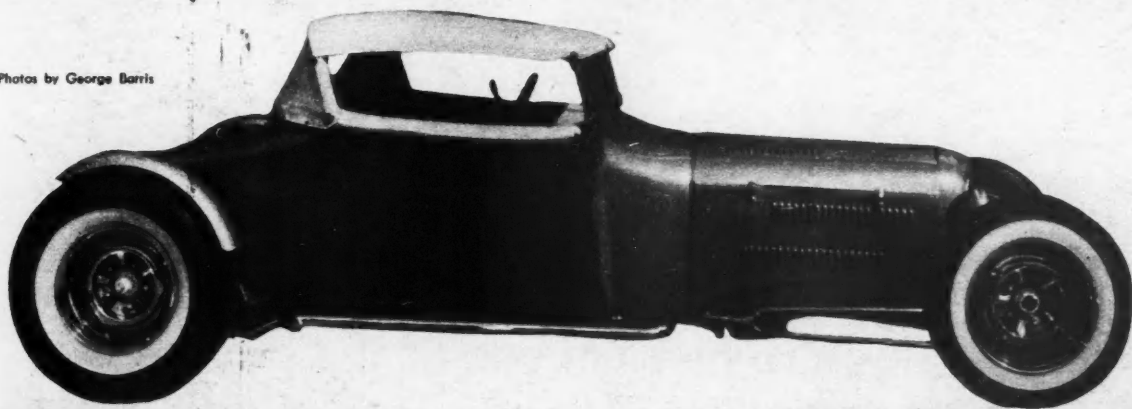
Seamless body shell - lots of chrome - potent Chev V8 highlight Ray Anderegg's prize winning street roadster

Because of the doors being filled in, panels on both sides of interior are solid. They and the chopped down seat are done in yellow and white Naugahyde, pleat and roll fashion.

Near stock '56 Chevrolet V8 moves the light roadster along in good style. External equipment is Edelbrock 3-jug manifold and chromed Corvette exhaust manifolds, '39 Ford box.



Photos by George Barris

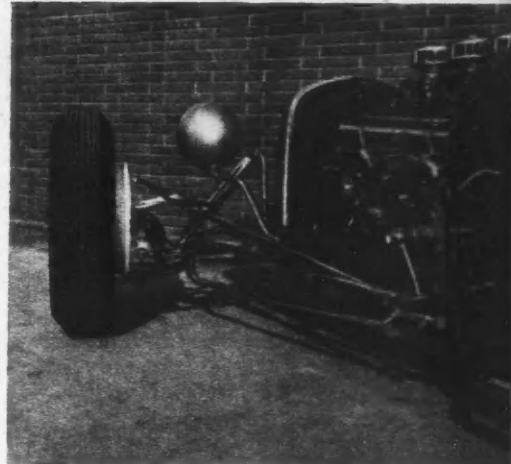


Means of entry into the little bomb with the top on is executed by Raymond in the above left photo. The top unsnaps at front, hinges out of way at the rear.

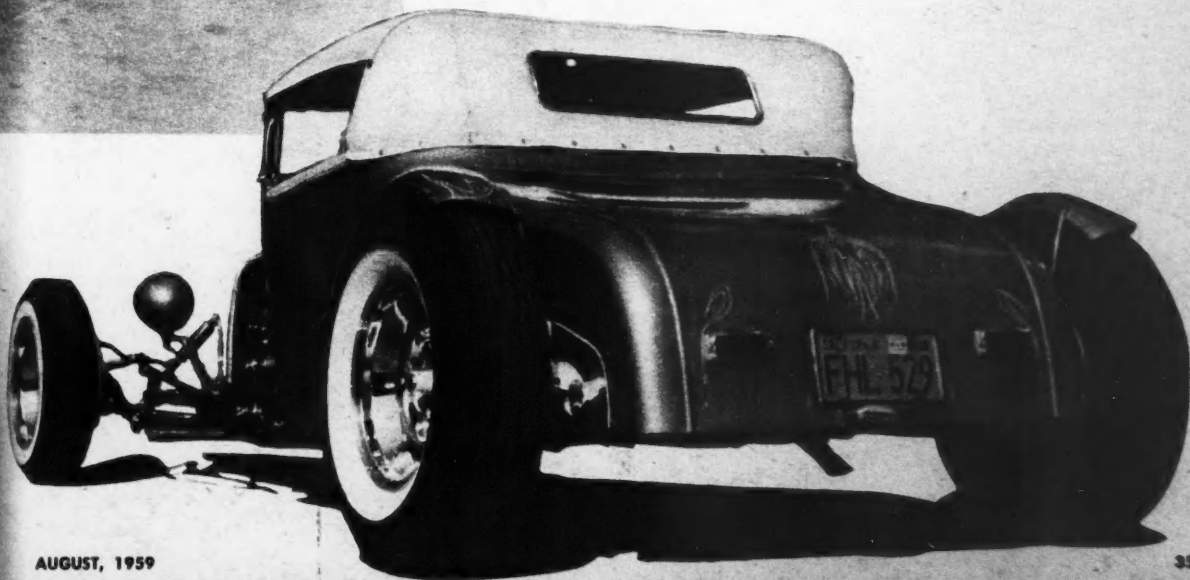
Ray started on his roadster in 1950 when he was given a T coupe body. He has spent much of his spare time and \$4500 to bring it to its present state.

Completely seamless body is channeled 4" over the frame. Dropped '32 Ford axle, springs, tube shocks and backing plates are chromed. Grille is '32 Ford.

Reversed '49 Mercury wheels have also been given the chrome treatment. Cycle type fenders are run at rear, none up front. Green Gold paint is a dazzler.



More chrome items are seen here: split wishbone, steering arm, etc. Small accessory type headlights are mounted on special arms. The brakes are hydraulics.





—you're just not one of the group
if your shirt is "stock"

"WEIRD SHIRTS"

"EACH ONE AN ORIGINAL"—that's the creed of today's top shirt artists. Following closely on the heels of the decorative pin striping and crazy scallop paint job for cars—now comes a new individual touch of creativeness for the owners! Zany theme aptly referred to as "weird shirts."

The freshly paint rendered shirts, as they emanate from the artist's drawing board, cost anywhere from three to five dollars and are available in T-shirt, sweat-shirt, or sport shirt styles. The shirts have taken the nation's young automotive fanciers by storm. In fact, a situation exists among the young aspirants that—you're just not one of the group if your shirt is "stock."

Confronting these weird artists who create these weird shirts as to how it all came about, we found the answers—*weird!* Popular automotive stripers, Dean Jeffries, had this to say, "I'm supposed to be weird? I made myself one to wear for advertisement while striping cars at auto shows. I had so many re-

quests for my shirt, not my striping, that I went into the shirt business." Another talented California stripers, Ed Roth, stated—"I was doodling with an airbrush one night at the shop. Man, when dawn broke the next morning, I found that I had painted three-hundred and sixteen weird shirts—none my size!" Latest arrival on the shirt scene is automotive cartoonist, Pete Millar. He explained his interests most profoundly—"I need the money."

More interesting than the doubtful inspirations of these artists is the actual rendering technique applied to the shirts themselves. Each an original, (agreed!) they are painted strictly free-hand from start to finish. Majestic fluorescent colors of red, yellow, orange, green, and blue, are first applied for background brilliancy. Next comes the principle subject done in a fine black outline, then shaded with accentuating values of color. Each shirt is a creative piece of art work—but for a closer look, let's see how each artist goes about creating his particular style.

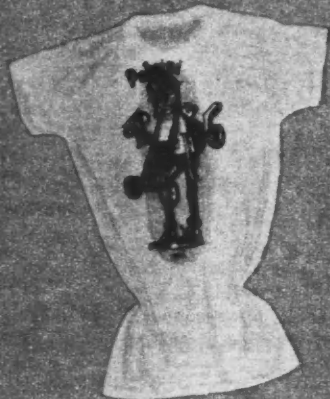


Photo by Hoffman, Craig



CAR CRAFT

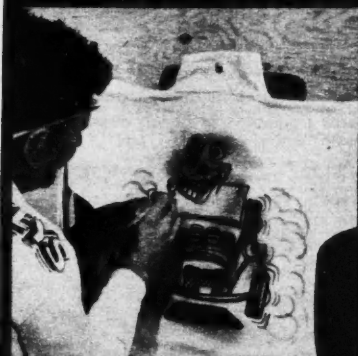
ROTH STUDIOS



... Ed Roth—airbrush—drawing board—and stylized shirts



... Ed applies vibrant colors to background, then outlines rod



... after car receives its share of shading, Ed commences on face



... last color application is the name, detail shading, 'signature'

JEFFRIES THE PAINTER



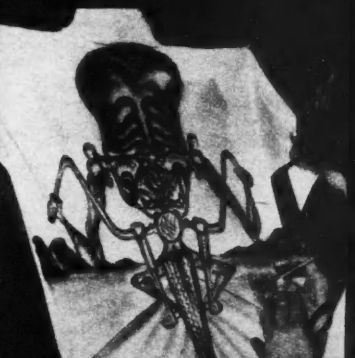
well-known Southern California striper, painter—Dean Jeffries



after laying in fluorescent color background, Dean free-hands...



... stylized bike and weird rider outlined in black and shaded...

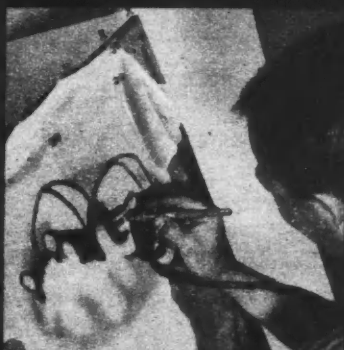


... finishing touches for the shirt are background, detail shading

PETE MILLAR



... popular automotive cartoonist Pete Millar, newest shirt artist



Pete's airbrush artwork closely resembles magazine cartoons...



backdropped with color, cars animated in stylized fashion...



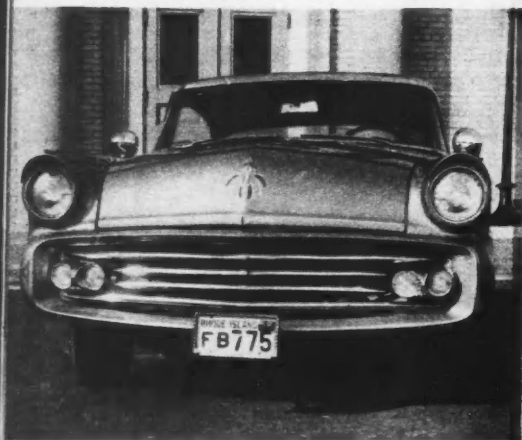
multi-colors, a few expressive titles as Pete finishes artwork

Golden VET

Frank Balzano's custom
show-piece tours
Eastern show circuits
dieting on golden
mantle hardware



Frank Balzano of Bristol, R.I. decided to build his '56 Ford after owning two semi-customs and because of an increase in car shows in his area. Frank had help from his brother John in work. Note five Buick portholes in hood, color is gold.



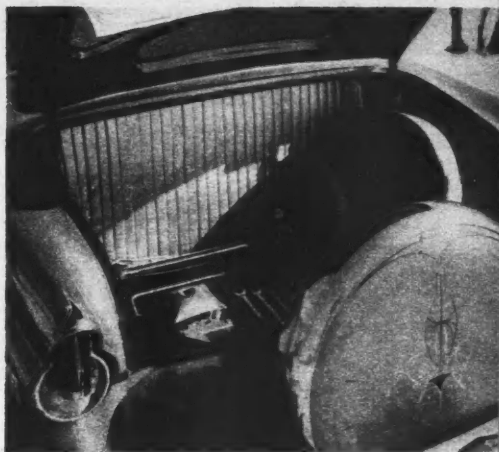
Front end is disguised through use of dual '53 Studebaker pans welded to one another, housing grille of four '55 Ford fender moldings with '58 Chevy taillights for turn indicators. No bumper is run; the headlights are frenched with '53 Mercury rings, note special hoods.

Photos by John Eddy



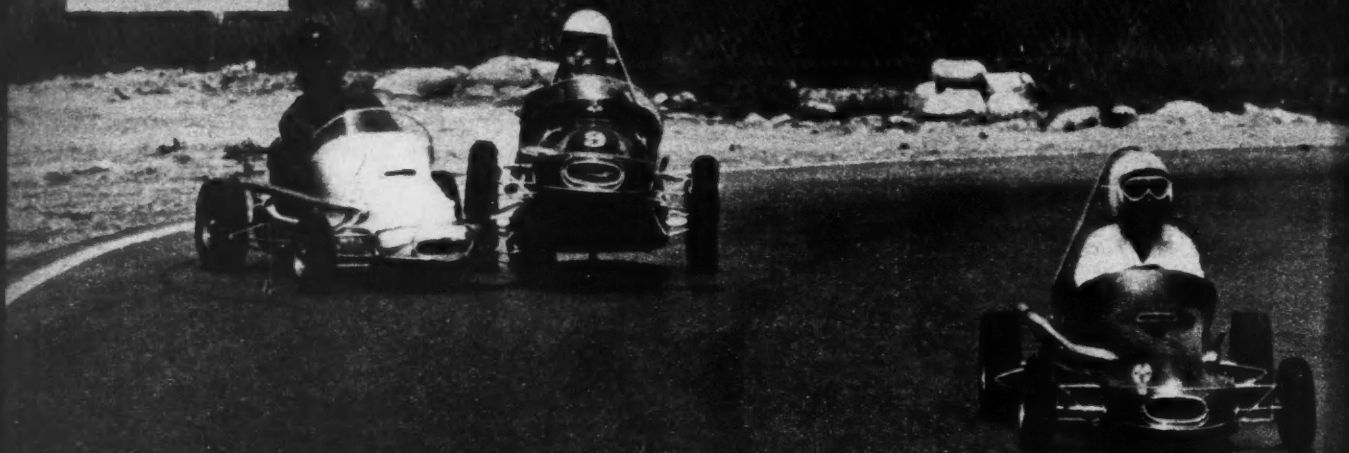


Rear area is complimented by '55 Mercury station wagon taillights, tunneled by metal lip. Exterior exhaust ends at tip of Mercury skirts which have chrome trim. Doors are electric; 14" wheels are covered with '58 Olds caps. Car is lowered 4".



Interior compartments—seating, trunk, engine areas—are beautified for best show appearance. Black/gold Naugahyde is pleated and rolled by West End Auto Top of Brooklyn, N.Y. Trunk has full line of tools, safety items. Engine is warmed-up, is connected to T-Bird floor shift. Many of the parts were chromed. Though not easily noticed in picture, hood has a special upholstered panel.





WOMEN IN ACTION

Traditional lady-like manners are sometimes obscure in women half midget events due to heavy throttles & traffic problems.

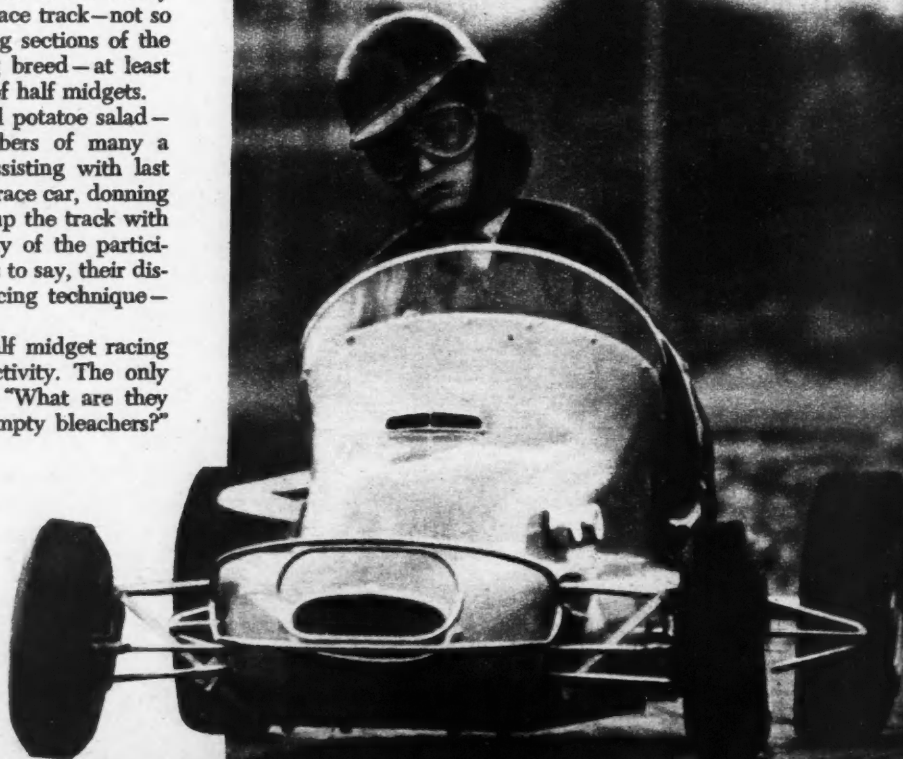
Distaff Daredevils take to the track in true "Stand-On-It" style

THERE WAS A TIME when the women folk packed the race day lunches and were content to "cheer on" the head of the family as he did battle out on the race track—not so today! The feminine cheering sections of the grandstands are a vanishing breed—at least in the amateur racing sport of half midgets.

In place of the pickles and potatoe salad—you'll find the distaff members of many a family in the racing pits assisting with last minute tuning on the family race car, donning crash helmets, and burning up the track with hot laps comparable to many of the participating male gender. Needless to say, their display of car handling and racing technique—is all their own.

We are aware that the half midget racing sport is truly a domestic activity. The only question that now arises is "What are they going to do with all those empty bleachers?"

Photos by Bob D'Olive





Although women events are considered fast — the only thing faster is our photographers! Randy Holt leaps for cover as one competitor gets bent out of shape. Hay bale buffer zone insures maximum protection to all competitors.

"Ooops — madam, you're axle is showing." Shearing wheel in last corner didn't deter this distaff daredevil who went on to win. Less weight you know!



Behind every successful man there is a woman. Bill Lowe and his daughter, Dianna, are consistent participants at local Southern California meets. Dianna is top driver in the women events.

Don't think that the girls are ones for shutting-off in corners — check pressure being thrown to the suspension system and tires on Moss car at left while driver remains cool and collected.

All members of the John Allen family are handlers for the family race car, each competing in individual classes. "Take the corner high, then drop in low" could well be Mrs. Allen's instruction to her husband. It's cold dinners and yard work when the men take back seats to Mom's victories.



RESTYLING THE CORVETTE

FEW CARS EVER CHANGED the method of customizing as did the Corvette when introduced in 1954 with its revolutionary all-fiberglass body shell. Though not a new concept now, fiberglass restyling does afford the amateur an inexpensive and relatively elementary method of customizing. For proof, we selected a new '59 Corvette, a budget of \$1000, and the assistance of auto stylist Dick Katayanagi of Translucent Color Company, Sacramento, California. Fiberglass mat and resin were formed over plywood tem-

plates to shape the new contours on the Corvette.

BODY MODIFICATIONS

Excessive chrome trim is removed while the indentations found in the front fenders and doors are highlighted by chrome tape. A flared edge trails from the rear wheel opening around the curve of the rear fender to the deck lid.

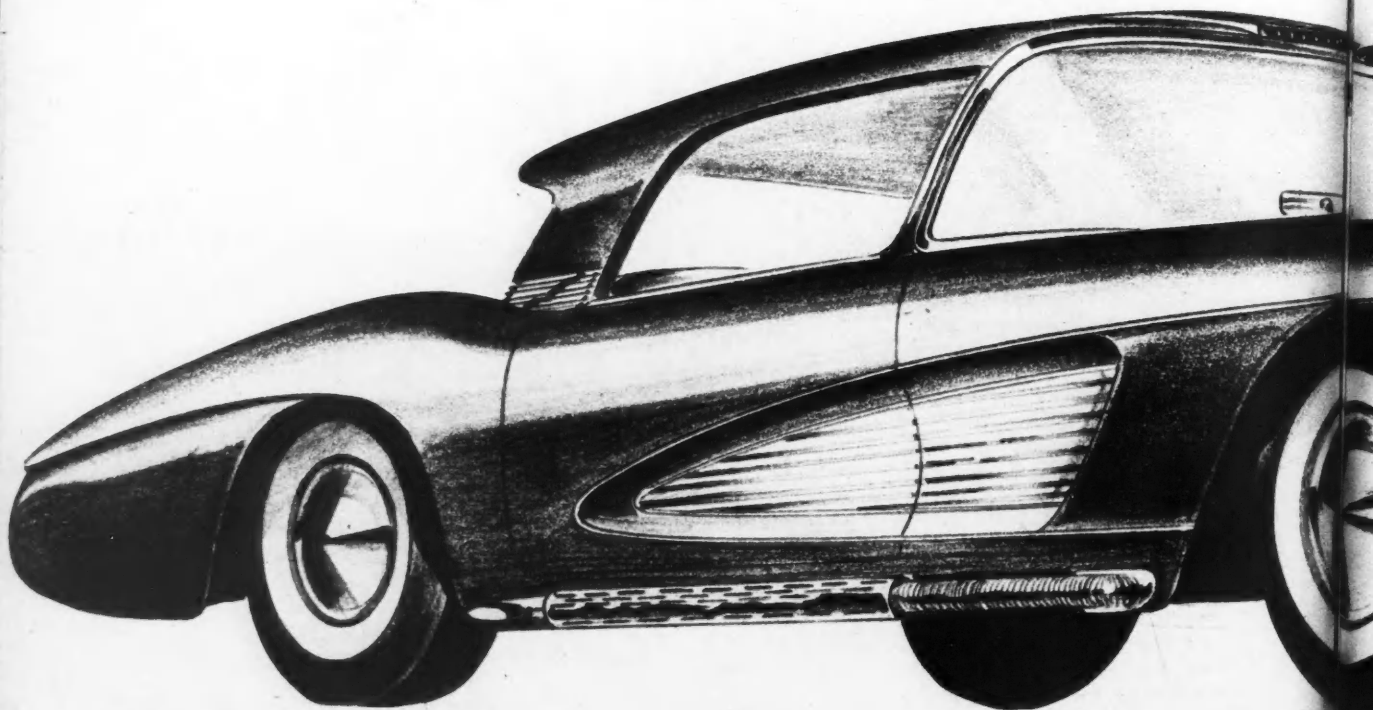
FRONTAL CHANGES

Completely disguised, the front end features a '59 Studebaker Lark

grille shell with center section of expanded metal screen. To accommodate the Lark assembly, the frontal area was reworked considerably. For protection, narrow nerf bar bumpers are installed.

Replacing the stock quad headlights are special assemblies with a trio of light units. Components for the canted arrangement are a '58 Mercury headlight and two '57 Oldsmobile parking lights. The complete assemblies are mounted to aluminum sheet metal bulkheads embellished with a layer of expanded metal.

ILLUSTRATIONS BY DICK COLLIER



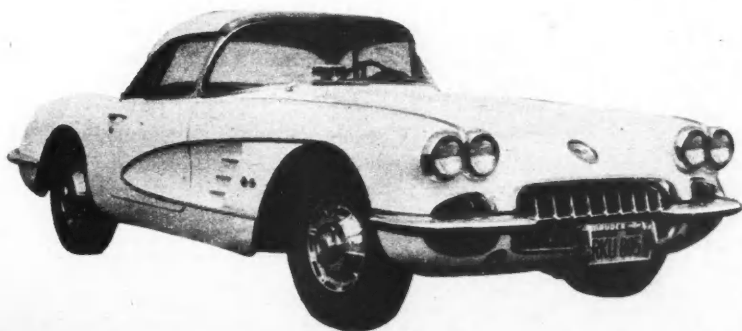
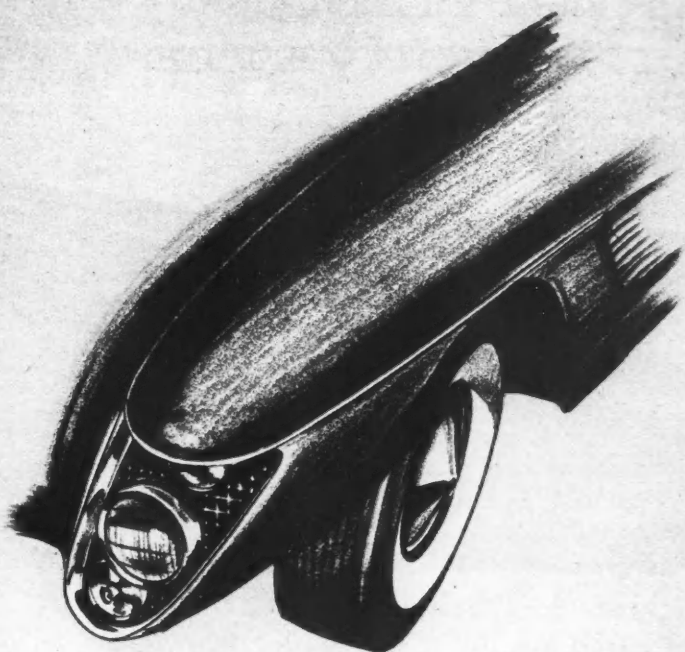


Dick Katayanagi

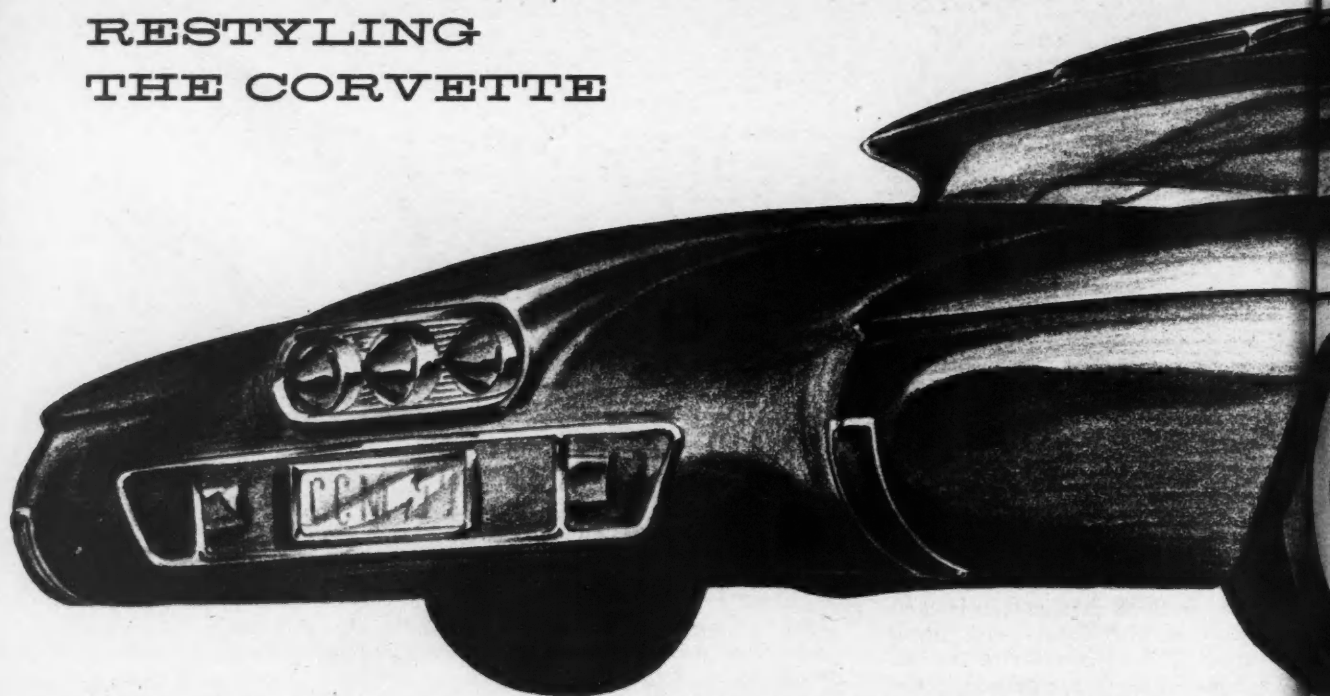
Cleverly hooded and tunneled cavities house each trio of lights in front fenders.

REAR ASPECT

Many novel changes have been incorporated into the rear end. Among them is the placement of the taillights. Rather than substitute another component for the stock taillights mounted in the fenders, Dick removed them completely. Replacing them are three '58 Chevrolet Impala lenses mounted upon a polished fluted



RESTYLING THE CORVETTE



metal plate. Taillight unit nestles in frenched opening of fashionable deck lid scoop. Mounted beneath the "Cyclops" style taillight housing is the license plate, recessed into the panel and protected by a nerf bar arrangement similar to the front bumper.

Fenders are filled and small built-up areas are added to the lower contour. Rather resembling thin, vertical taillights, these decorative fiberglass

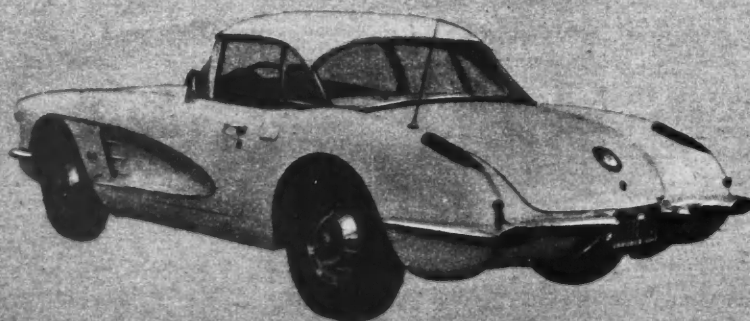
moldings are surrounded by a thin round rod frame.

DETAILS

Major modifications were performed on the Corvette's removable top. The stock "DeVille" type styling is further enhanced with wider side panels, partially decorated with chrome tape, and an extended rear roof line. A top scoop has also been added, trailing from the leading edge

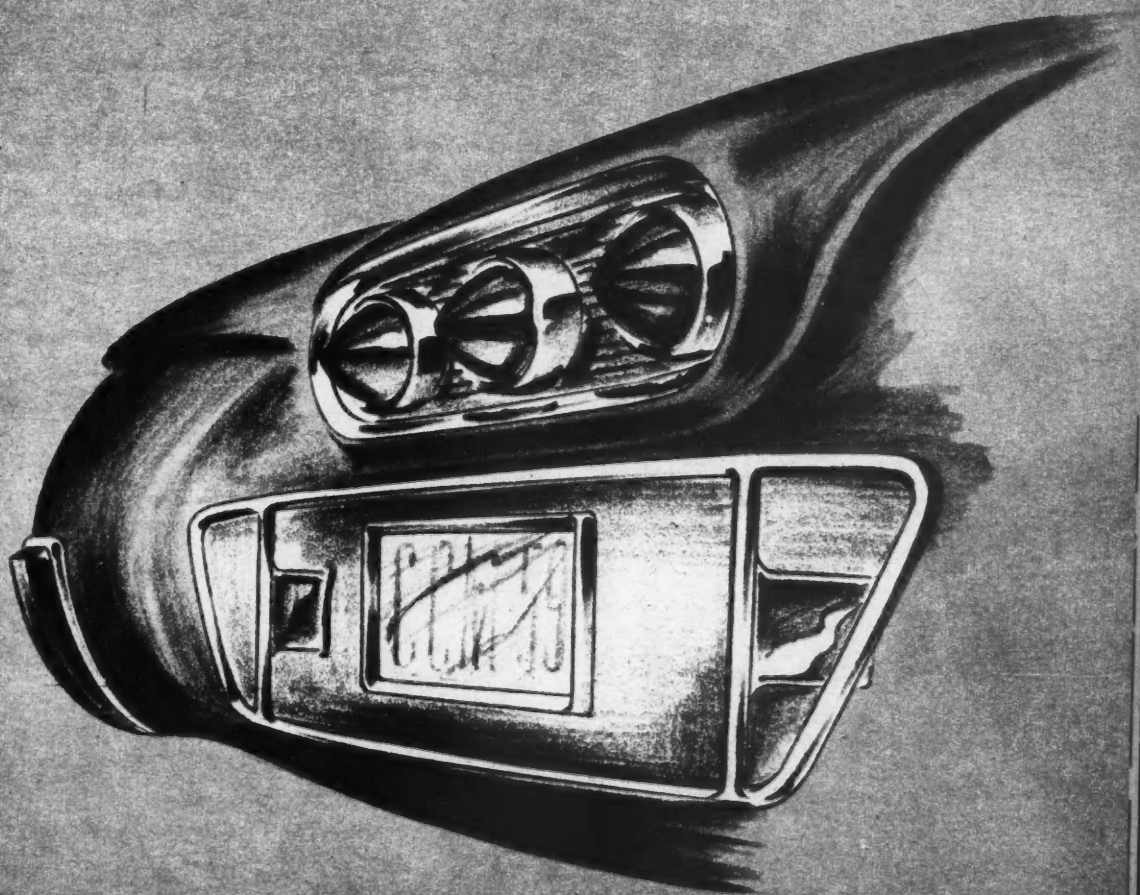
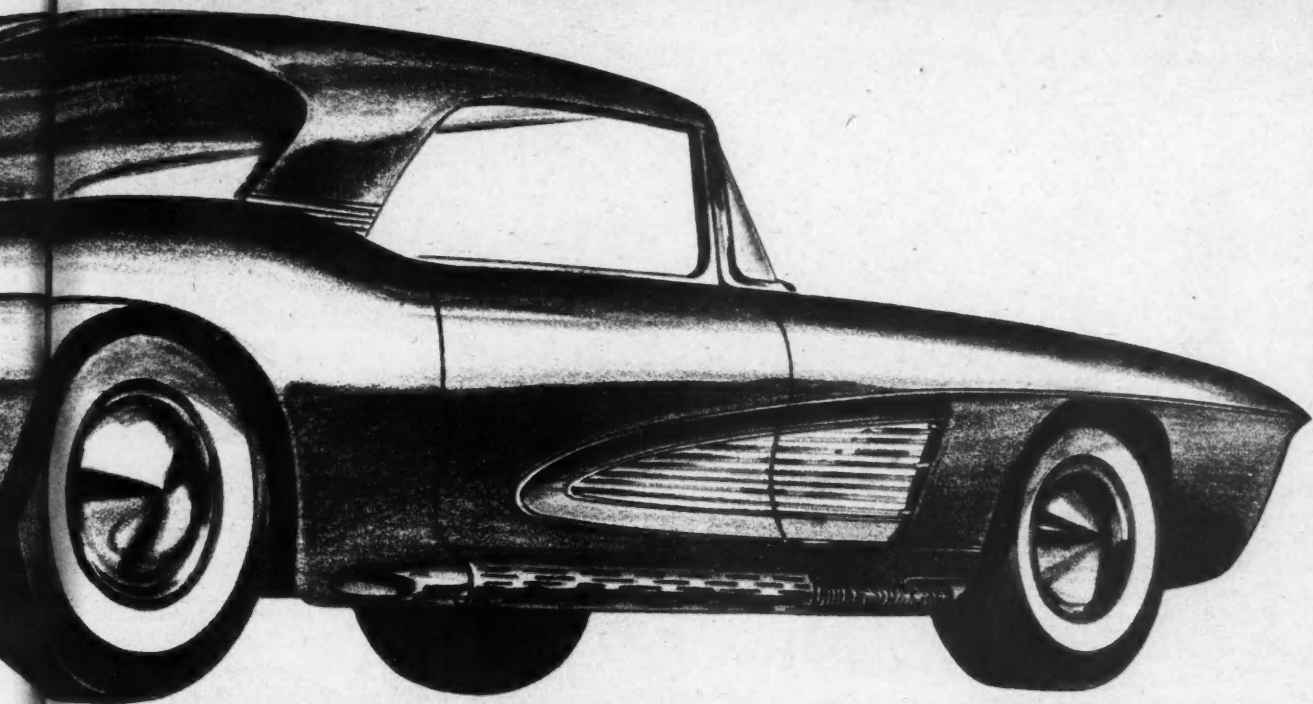
rearward, which incorporates double scoop openings. The front opening is trimmed out with bolt-on chrome teeth and horizontal antenna, while the rear cavity remains "pure" of decorative ornaments.

A mild lowering job of two inches both fore and aft, chromed heat guards for exterior exhaust systems, and a flashy translucent lacquer paint job are the finishing touches for the stylized Corvette.

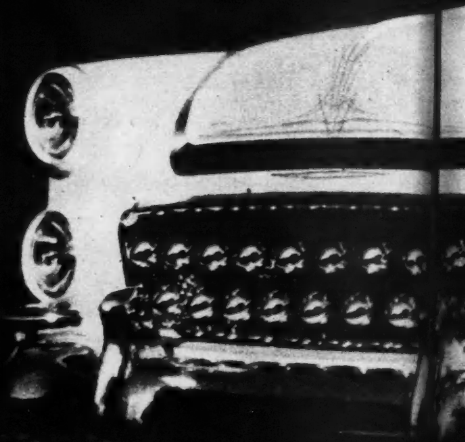


PRICE LIST

	Parts	Labor
Headlights	\$ 14.75	
Parking lights	45.00	
Studebaker grille	421.00	
Chevrolet taillights	14.25	
Lowering		\$ 25.00
Glass, mop, resin, etc.	125.00	200.00
Paint, complete	223.00	775.00
	775.00	
TOTAL	8495.00	



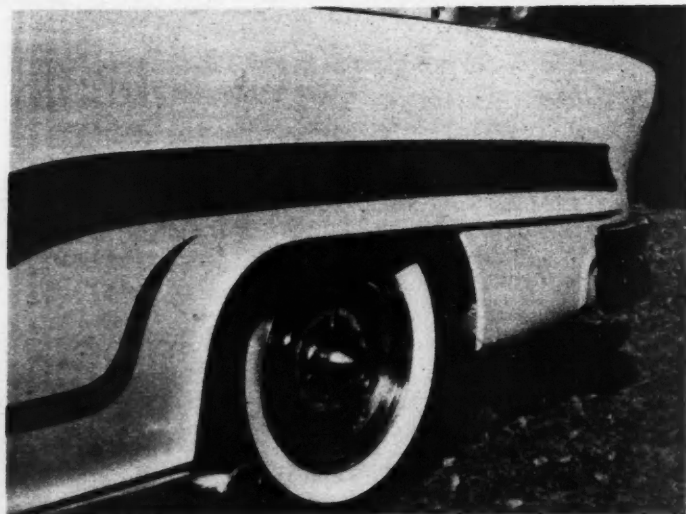
Draggin' reamboat



Former owner of five rods and one custom, Jim Seaton of Santa Maria, Calif., contracted Barris Kustoms, Lynwood, Calif., for customizing. Seaton did engine work. Pearl lacquered, Chev has Burgundy scallops for accent.

Separated headlights are English Lucas light units installed vertically in reworked front fenders. '59 Mercury rings were used to aid in french job.

Rear wheel openings are flared with new slant: trailing lip of metal added to enlarged opening; tires are glittered, on reversed chromed wheels.

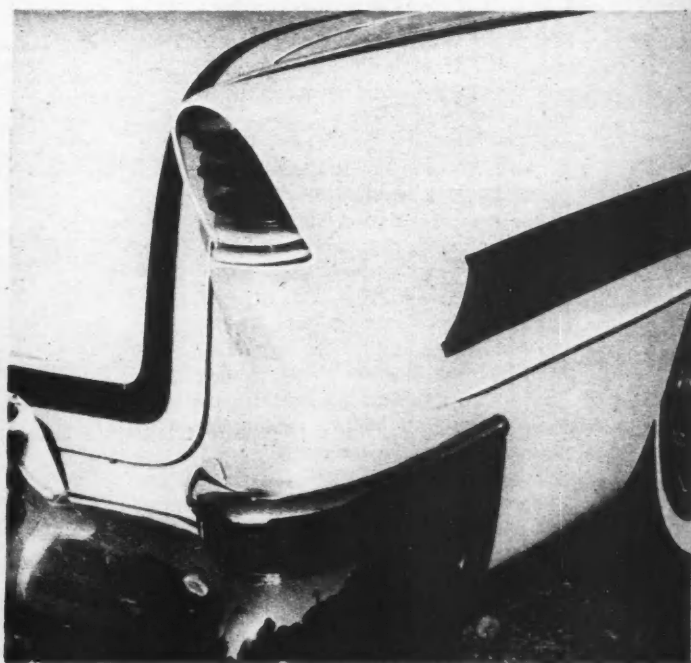
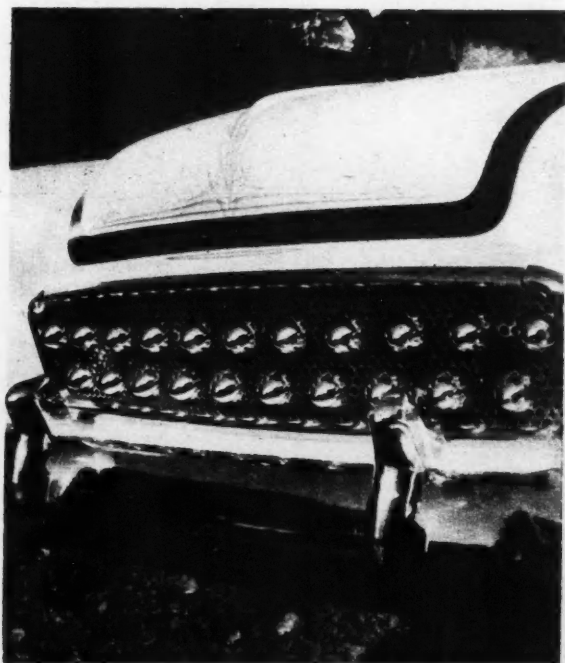





Photos by George Barris

Stock grille assembly houses perforated metal screen with dual row of staggered chrome accessory bullets bolted-on. Above, chrome trim is '55 Dodge; Mylar gold tape added.

Stock '55 Chevrolet taillight unit is tunneled in fender. Special feature is addition of five plastic tiers to lens, constructed of sheet plastic and contoured to lens' surface.



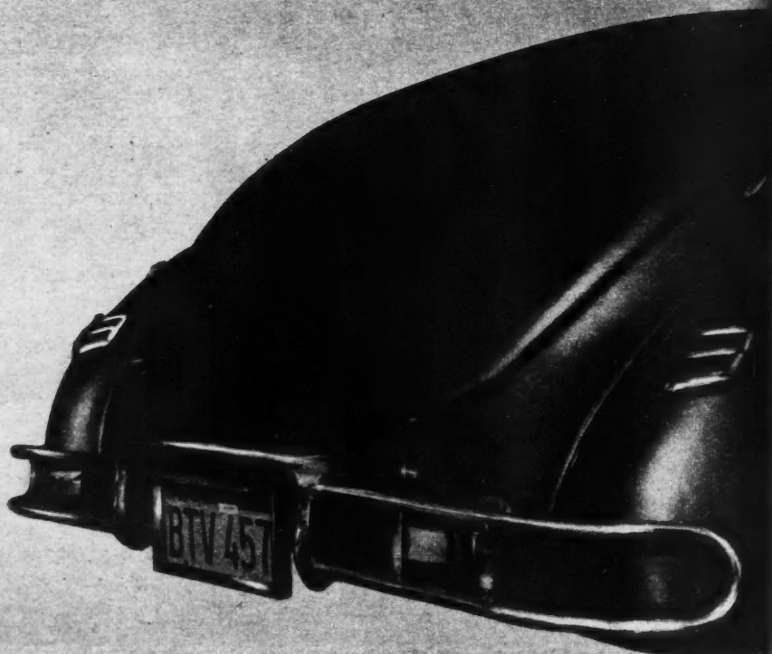


here's
how:

**BUILDING YOUR OWN NERF BARS IS ONE WAY
TO ATTAIN ORIGINALITY IN A CUSTOM APPEARANCE**

CUSTOMIZING AT ITS best has to contain originality. One of the best ways to achieve this is to do it yourself. Although some customizing processes do not leave too much room for variety, this is not the case with nerf bar bumpers. By building them yourself, you are not limited to any particular style, design, or construction. Hence, it is a good way to introduce originality to your car. The following photo-story shows you the procedure for building a set of nerf bar bumpers. The new gimmick to the installation is the adapting of a '49 Chevrolet license guard to the bars, giving the license plate protection, which is a feature lacking in many similar designs. As can be seen in the photos on this page, the same design is used front and rear for balanced styling. This is just one idea. If you can think up your own design and use this as a work plan, the result will be strictly "original."

Photos by George Barris





1. Stack brackets must be heated and curved back toward pan and fenders.



2. Trim down the brackets, then drill or cut holes for the attachment bolts.



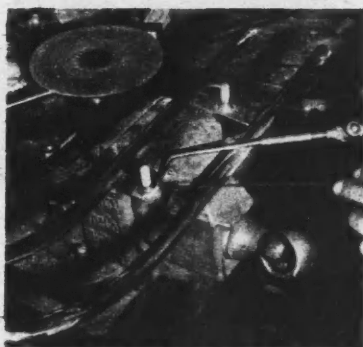
3. Bend the tubular bars to the correct width. Make sure bends are identical.



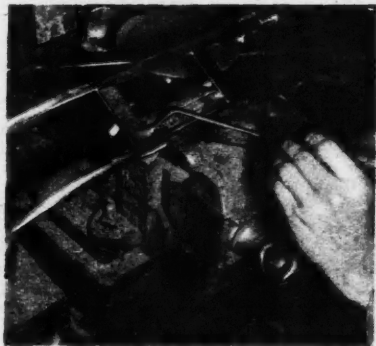
4. Next, bars are bent slightly to follow the curvature of the fender lines.



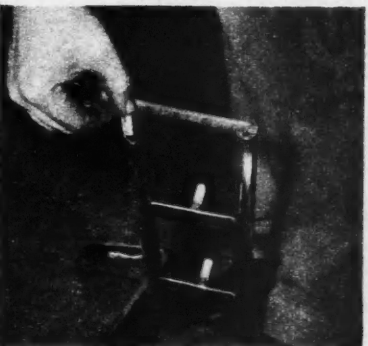
5. Measure inner width of nerf bars, transfer to metal strap, cut to size.



6. Align nerfs with brackets, tack metal strap on, braze on attaching bolts.



7. Check for fit to brackets, braze the straps solid to nerf, grind weld bead.



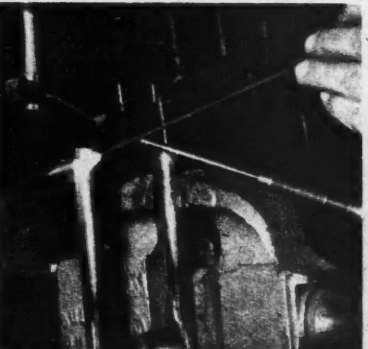
8. Measure width, center to center, on open end of the nerf. Must be accurate.



9. Transfer measurement to the Chevy license bracket, mark and center punch.



10. Drill holes in both sides of guard, slightly larger than bolts to be used.



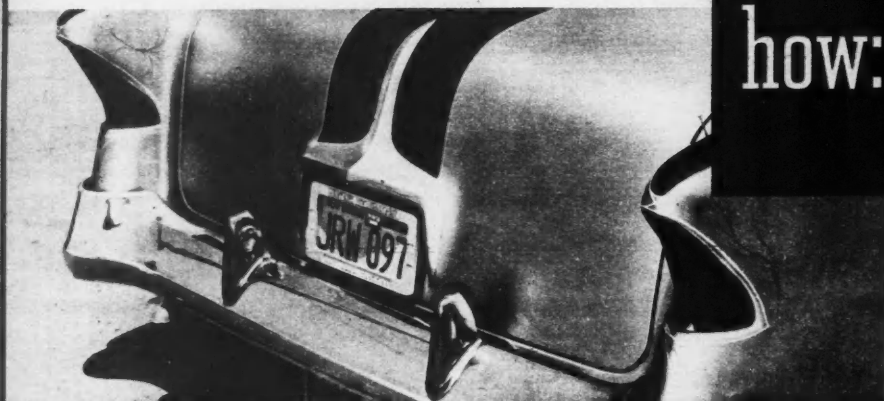
11. Braze proper size nut to open end of nerf. Attach guard to the nerf bar.



12. Make final check for fit of all the parts. Nerf is ready for chrome tank.

Glamorizing your license plate is inexpensive and easy—once you know how

here's
how:



THE LICENSE PLATE has always been a problem to the customizer. Where to mount it? Many methods have been used to try and enhance the license plate setting. Some have been good, others not so good. Brackets have been made to mount it on the bumper and it has been sunk into the deck lid, covered with glass. The newest and rapidly becoming most popular is to build a metal sculptured shroud as a setting for the plate. The surrounding photos show some of the many different shapes and designs that have been used. The shroud design used in this step-by-step story is a simple but effective means of transforming a tacked-on look to a custom integral appearance. Star Kustom Shop of Wichita, Kansas, performed the work on a '51 Ford but said that the same method could be employed on most of the later model cars.

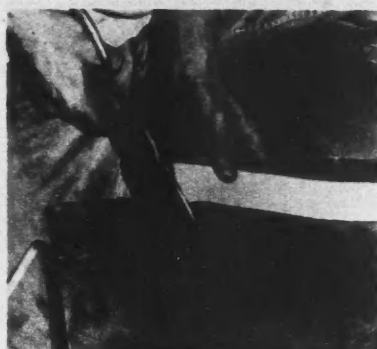




1. First form the shape of the shroud of 1/2" conduit. Make each band identical.



2. Tack the 1/2" conduit to trunk. Align from all angles to insure perfect look.



3. Make a cardboard template to fill the gap between the trunk and conduit.



4. Transfer template to sheet metal, cut out, form filler piece to the contour.



5. Braze filler piece in place, grind area clean, apply tinning compound.



6. Excess acid from tinning compound must be wiped off with a clean cloth.



7. Apply body lead to the area, shaping to contour with a wooden paddle.



8. Work out any low spots, then file the corners smooth with a vixen file.



9. Feather-edge painted area and block sand surface with 220 grit sandpaper.



10. Clean surface thoroughly with wax and grease remover, apply metal prep.



11. Spray on several coats of primer, block sanding well between each coat.



12. Completed modification is one that looks right at home on the deck lid.

Scotty's 1/4 & 1/2
MIDGET
ENGINE PARTS AND ACCESSORIES

Parts of proven performance and dependability. Complete line of Continental Engine parts.



Send 25¢ for parts price list and decal.

Scotty's RACING EQUIPMENT
305 G. STREET DEPT. CC-8
SAN BERNARDINO, CALIFORNIA
Phone: Turner 9-6196 or TUsado 4-5175

ANNOUNCING
THE
MARK 3



WERNER
Lil Champ
INDIANAPOLIS STYLE ROADSTER
FULL 50" WHEELBASE
COMFORTABLY SEATS AN ADULT
BIG ENOUGH FOR A 1/2 MIDGET
SMALL ENOUGH FOR A 1/4 MIDGET
TORSION SUSPENSION ALL 4 WHEELS
\$560 READY TO RUN

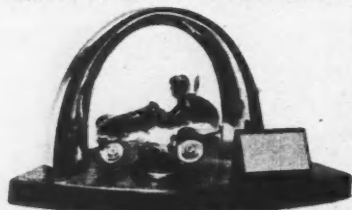
LIL CHAMP CONVENTIONAL TYPE 1/4 MIDGET
ASSEMBLY KIT \$330
COMPLETED CAR \$395
PLANS AND PARTS LIST \$2.00
PRICES F.O.B. MILWAUKEE

FOR FURTHER INFORMATION WRITE:
WERNER LIL CHAMP
6434 N. 40TH STREET
MILWAUKEE 9, WISCONSIN

TRULY MODERN trophies

PROUD TO AWARD

PROUD TO RECEIVE



No. 9015
Quarter Midget
Net \$6.50

Solid Walnut
Hard Rubber
11" x 5 1/2"

EXCLUSIVE DESIGNERS AND MANUFACTURERS
BUY DIRECT FROM US AND SAVE MONEY
CATALOG ON REQUEST WE SHIP ANYWHERE

CUSTOM TROPHY MFG. CO., INC.



"MY FASTEST RIDE"

ped rolling the lining biscuits in the spot brakes were on fire and the steel brake discs were so hot that I could see through them. I didn't know metal could get that hot and stay together. The fluid in the brakes boiled and everything else in them was cooked. I learned the hard way that brakes on a streamliner are there only to slow the car after it has decelerated to under a hundred miles an hour. I applied the brakes once at 250 miles an hour and they were gone by the time I had slowed to 200.

I've given a lot of thought to the return run stopping problem and I've decided to install a parachute, like those used on jets to slow them on landings, in the tail of the new car for emergency use. I've already talked to the people at the Ruppert Parachute Company about this and they're going to make a chute for me.

I'm positive a chute will stop the car in a hurry but one of the problems with such an arrangement is that the chute will be about fourteen feet in diameter and I can't possibly mount it over twenty-three inches from the surface of the salt. Chutes of this type are strong but the material in them is on the delicate side. I'm sure one wouldn't last very long dragging on the salt. I don't know what we'll have to do about this but I'm sure Ruppert will figure out

something.

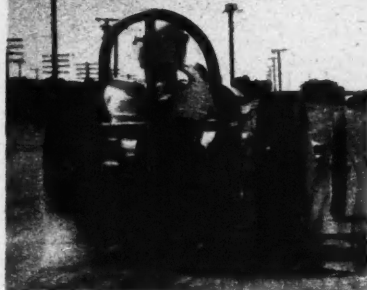
The new car is going to have four engines instead of two. I've decided to use Pontiacs instead of Chryslers because they're considerably lighter in weight and quite narrow. Also, they have a very good crankshaft and connecting rod assembly.

On gasoline, my two Chryslers delivered a total of 880 horsepower. This was on the dynamometer at Harman and Collins. We think the Pontiacs will deliver about 430 horsepower each on gasoline. This will give us a total of 1720 horsepower, which is nearly double the power we had last year. If the engines don't put out as we expect them to on gas, we'll go to fuel.

Ed Iskenderian, of Iskenderian Racing Cams, has offered us full cooperation on our engine program. This is one reason we think the engines will meet our expectations. He is supplying roller tappet camshafts for the six engines we are taking to Bonneville and has hired Fred Voigt to assemble and dyno test them. With Voigt handling the engine chores I'll have more time for the car's chassis.

There isn't much left to say except that during the last week of August this year I'm going back to Bonneville and break the World's Land Speed Record. I'm as sure of this as I am that Bonneville salt is white.

DETROIT...



HERE WE COME

OFFICIALS OF THE National Hot Rod Association announced that Detroit, Michigan has been selected as the site for this year's National Championship Drag Races. A brand new strip and first-class facilities are being readied for the year's premiere hot rod event, which takes place over Labor Day weekend—Sept. 3, 4, 5, 6 and 7.

Known as the Detroit Dragway, the new 4,500 foot asphalt straightaway is located at the center of a 5-million population area—just 20 minutes from downtown Detroit, 10 minutes from Dearborn and 30 minutes from Toledo. In selecting Detroit as the site of the 5th annual National Drags, NHRA officials weigh population and membership volume against geographical distance to determine a center for this major event.

Being right in the automotive capital of the world, the 1959 Nationals are expected to attract an unprecedented number of top ranking representatives of the auto industries and should firmly establish the identity of this event as a major U.S. sports activity.

NHRA officials anticipate a turnout of some 100,000 people during the '59 Nationals' five days running. One of the extra highlights will be the inclusion of night drags for production Stock cars. Two nights, September 3, 4 (Thursday and Friday) will be devoted to this action, with a big Saturday night Rod & Custom Show also planned.

Class eliminations and the National Championship runoffs will be held on Sunday, all day, for competition car classes. Sports cars and Gas coupes/sedans will run on Monday, Labor Day, interspersed with the usual top speed record runs for competition classes.

Where last year's entries were closed-out at 500 cars, an additional 250 or more can be accommodated at Detroit. Known as the annual BIG GO, the Nationals attract the cream of drag racing's cars and drivers.

Further information and entry forms on the Nationals may be obtained by writing to: NHRA NATIONALS, 1171 N. Vermont Ave., Los Angeles, 29, Calif.

AUGUST, 1959

1/4 & 1/2 MIDGET ENGINES

PARTS • ACCESSORIES • MODIFICATIONS

Balch's Garage Main Perpetual Trophy

A SOLT ENGINE DID IT AGAIN

Steven Kaster 12-year-old AA chauffeur from Van Nuys, California, was awarded the huge Main Perpetual sponsored by Balch's Garage in Los Angeles, Saturday night, May 9, 1959.

Being (1) a member of the National Quarter Midgets Inc. of San Fernando, Calif.

(2) the first driver to win three Main events. (The trophy was up for six weeks and Steve won it on the sixth.)

Presentation was made at the San Fernando asphalt oval. Needless to say Steve is a very proud boy.



Steve's father is the mechanic and pit crew. Does all his engine work. Solt equipped and using the new Solt #9 cam.



SEE YOUR LOCAL DEALER FOR FREE BROCHURES & DECALS OR SEND 25¢ FOR BROCHURE & DECAL

FIRST CHOICE BY TOP DRIVERS AND MECHANICS

All Retail Sales Prepaid Parcel Post.

AUTHORIZED CONTINENTAL SALES & SERVICE

SOLT ENGINES

A Division of Solt Automotive • Mfg. of Precision Screw Machine Parts

5926 Noble Ave. Van Nuys, Calif. • ST. 5-5464

DO-IT-YOURSELF STRIPING KIT



A New and Easy Method for Striping Your Car. Designed Specifically for the "Do It Yourself Fan". Reg. Kit includes: Easy Instructions, Illustrations, Patterns, Pro. Brush, Ready-Mixed Striping Paint. Specify 1 Color: White, Black, Red \$3.00
Kit #2 (Reg. Kit Plus 2 Extra Colors) 5.00
Kit #3 (Reg. Kit Plus 14 Special Patterns: Eyeballs, Skulls, Spider Webs, Dragons) 6.00
Kit #4 (Reg. Kit Plus 3 Colors, Spl. Patterns) 8.00

Vent Striping Kit

1509 N. SAN FERNANDO • DEPT. CC8 • BURBANK, CALIF.

ROAD RACE COMPETITION

THRILLING and SAFE in a . . .

SAM HANKS

BILL MOSS



MOSS MIDJET

ROAD RACING is exciting!! Buckle yourself behind the wheel of the new Moss 1/2 Midget and accept a real challenge of your driving ability on a road race course. Accelerate down straightaways, hit the brakes, drift through tight turns, discover first hand the conquering feeling that entrances all sports car champions.

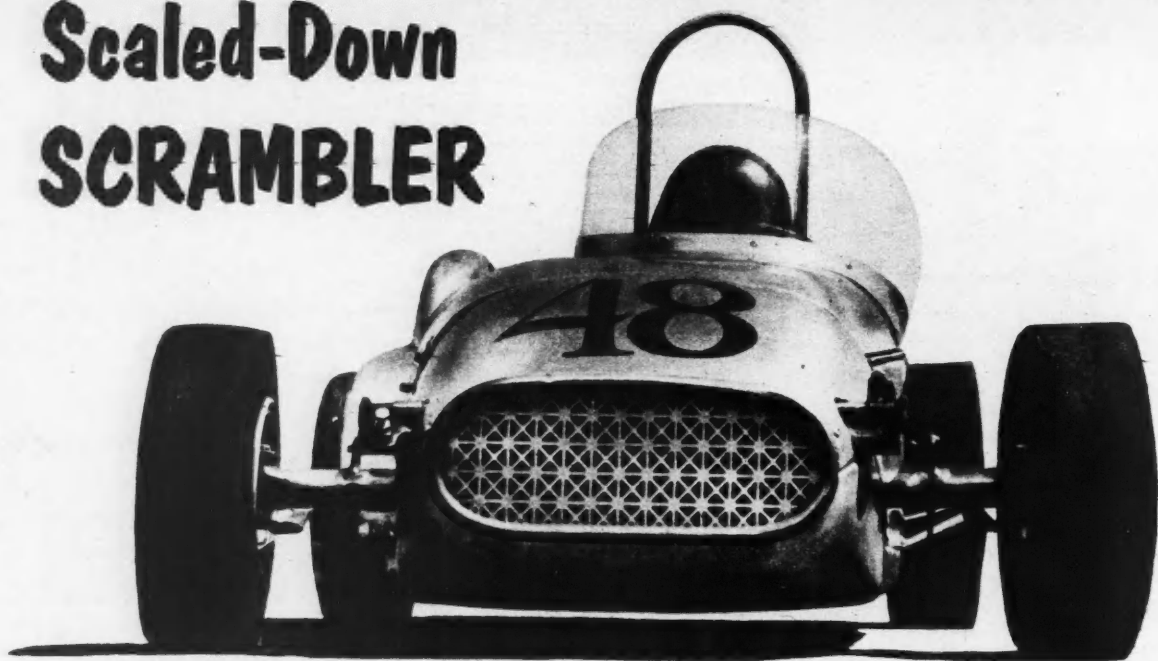
The Moss 1/2 Midget is designed for everyone. Women — Men — Kids — teenagers.

Write TODAY for colorful BROCHURES on the Moss line of cars and accessories. Send 25¢ for postage and handling.

MOSS ENGINEERING CO.

102 East Beach Ave.
Inglewood, California

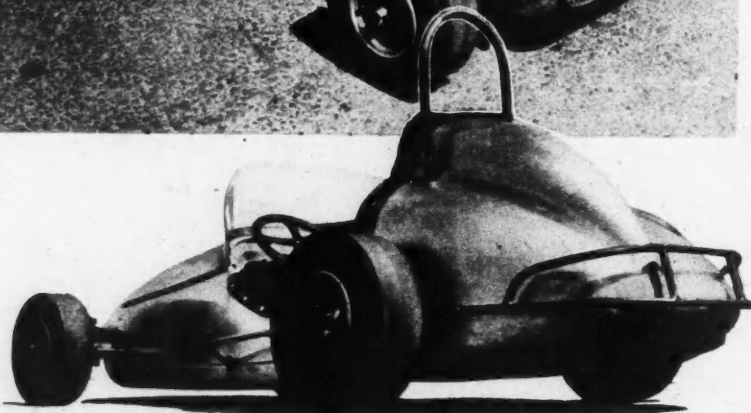
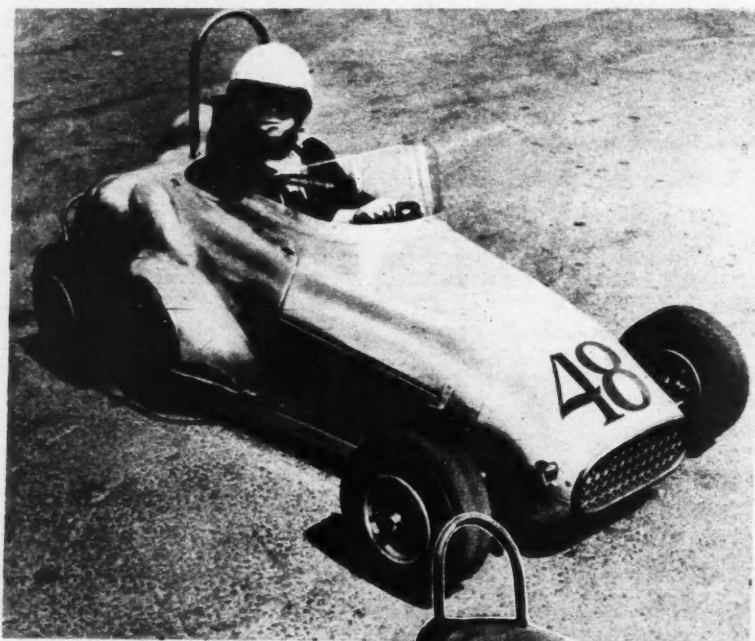
Scaled-Down SCRAMBLER

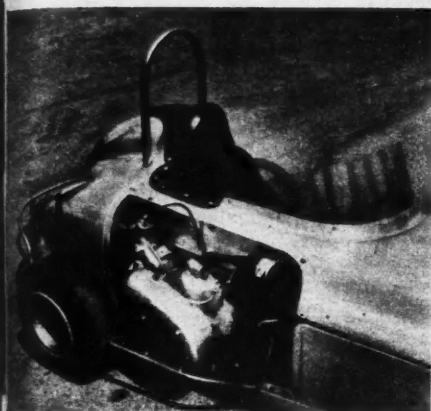


Miniature "Indy" body, Side Mounted Engine— prove flashy combo for pint-size speedster

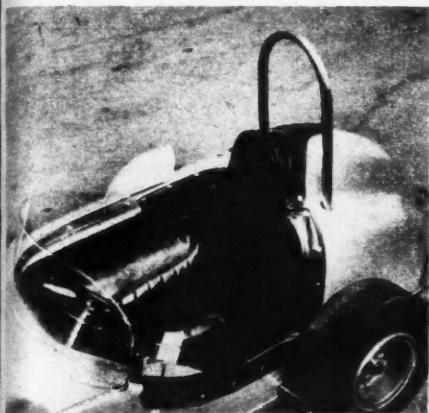
Nine year old, Dean Thompson of Los Angeles, sits it out for CAR CRAFT'S camera in his revolutionary scaled-down "Indy" type quarter midget race car. All-aluminum body features hinged one-piece cowl and hood section, quick release engine cover. One time Indy car builder and owner, Bruce Bromme, designed and built the small speedster.

Miniature roadster not only has it all its own way for looks—but is quite a runner in the performance department. Dean, only recently toured the Los Alamitos 1/20th mile banked track in 6.65 seconds—a rapid hot lap for a fuel burners. The wheels are made from magnesium; deep dished rear doughnuts feature knock-off assembly. Body hugs the ground with minimum 1 1/4" clearance, while wheelbase measures a total 45-inches. Tread is 29 1/2-inches front and rear; overall height 23-inches.

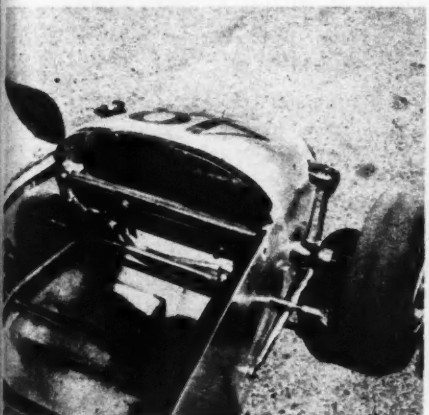




Side cavity houses Evans equipped Continental engine. Weight combination of engine/driver just ahead of rear wheels is ideal weight distribution.



Rip's Top Shop of Gardena, California, is credited with the immaculate interior detail. Design of body offers maximum protection from right side of the car.



Trailing torsion-bar arms control solid front axle. The steering features U-joint assembly just under cockpit's dash panel due to low contours of sleek body.

AUGUST, 1959



the **MANTIS** IS

- UPHOLSTERED
- ASSEMBLED
- PAINTED
- READY TO **GO!**

Now, you too can enjoy the popular karting pastime without over-extending the family budget. Why pay \$189.50 or even \$169.00? Available now with no hidden charges. **MANTIS KART** is what you've been waiting for: **TOP QUALITY** at Bargain Basement Prices. No other karts **GIVE** you **PAINT**, Upholstery and **FULLY ASSEMBLED** cars at anywhere near this fabulous price. No gyppo junk - Spot Brake - Brand New Motor (Not a **REBUILT**) - Ball Bearing Wheels - Tube-type tires - Chrome-moly Frame Members - Ball Bearing Steering. **NO WAITING - IMMEDIATE DELIVERY.** Get in on karting fun **TODAY. DEALERS!** We've got the deal you've been waiting for. Write Today on your letterhead. Color Brochure sent for 25 cents (covers handling).

\$146⁶⁶

F.O.B. Duarte

MANTIS KART CO.

P. O. BOX 104 • CC-8 • DUARTE, CALIFORNIA

Orbit
Seven

QUARTER MIDGET RACER

\$490.00 complete

Brand new 1/4 midget from East Coast! A winner in speed and looks.

THE ORBIT SEVEN

COMES COMPLETE WITH ALL THE FEATURES SHOWN (MANY OF WHICH ARE "OPTIONAL EXTRAS" ON OTHER CARS) FOR THE LOW PRICE OF \$490.00 F.O.B. STRATFORD, CONN.

DEALER INQUIRIES INVITED

FEATURING:

SPECIAL Heavy-Duty Continental AUTR Engine with Forged Rod, 6:1 Reduction Gear. All Welded Channel Frame. Demountable Hub Wheels 4" and 6". Husky Chrome Roll Bar. Atomic Welded and Chromed Nerfs and Bumpers. All Ball Joint Adjustable Front Suspension and Steering. Twin Air Scoops for Efficient Cooling. Naugahyde Upholstery. All Aluminum Parts Buffed to a High Polish. Safety Belt.

Send 10¢ for color brochure and parts list today...

THE ORBIT MIDGET MFG. CO. 400 Surf Ave., Dept. CC-8
Stratford, Conn.



1959 FORD



1958 FORD & Thunderbird



1957 FORD



55-56 FORD



1952 FORD

STAINLESS STEEL TUBULAR TYPE CUSTOM GRILLES

For 52-59 FORD 55-59 CHEVROLET 1958 THUNDERBIRD NOW... **\$19⁹⁵** Each

Give the front end of your Ford, Chevrolet, or Thunderbird an entirely new, more beautiful look. Add sparkling, streamlined beauty. Grilles are custom valored and contoured to harmonize with chrome trim, blend in perfectly with body lines. Tubes curve sharply back at each end to blend into grille opening. Grilles are complete with necessary mounting brackets, bolts and are already assembled. Easy to install—no alterations, cutting or welding necessary. Perfect fit guaranteed. **GUARANTEED RUSTPROOF.** Deluxe quality—heavier 3/4" diameter, 18 gauge heavy stainless steel tubing. Tubes used in these grilles are not solid but 2/3 of a full tube—open in back. Brackets have welded studs that match original grille mounting holes. No alterations required. New parking light housing supplied when necessary for installing lights behind grille (except 55-56 Chevrolet & Ford).

J.C. WHITNEY & CO. USE THIS HANDY ORDER FORM
1917 (C-28) Archer Ave., Chicago 16, Ill.

Enclose Check or Money Order for \$19.95 plus \$1.30 for shipping charges to cover payment in full (or 25% if C.O.D.). Please do not send currency or stamps, if C.O.D. order, enclose at least 25% deposit, pay balance plus shipping charges upon delivery.

Name _____

Address _____

City _____ Zone _____ State _____

My car is a _____ Year _____

NOTE: Be sure to give Make and Model of car when ordering.



1959 CHEVROLET



1958 CHEVROLET



1957 CHEVROLET



1956 CHEVROLET



1955 CHEVROLET

ACER-RACER

Racer Kit
\$129.50

COMPLETELY
ASSEMBLED
RACER
\$189.50

Blueprint and
Specifications
\$2.00

F.O.B.

Cockeysville,
Maryland

DEALER INQUIRIES INVITED

SEND 25¢ FOR DESCRIPTIVE LITERATURE

The ACER COMPANY

COCKEYSVILLE, CC-8, MARYLAND



EASTERN H.Q. for all 1/4 and 1/2 MIDGETS and PARTS



We are the eastern distributors for
Mass 1/4 & 1/2 midgets.

CALIFORNIA SPEED & SPORT

294 Jersey Ave., CC-8

New Brunswick, N.J., KI 5-0311

Send 25¢ for illustrated Catalog

WIL-CAP

ALUMINUM FLYWHEELS FOR
ALL OHV V-8 ENGINES

- cast only of the finest aluminum and heat treated
- stock flywheel dimension
- only one-third the weight of stock flywheel
- machined to the closest tolerances
- drilled for stock clutch
- a net charge of \$1.50 for drillings other than stock.

WIL-CAP FLYWHEELS ARE COATED BY THE
REVOLUTIONARY SANFORD PROCESS

- Coatings are electrochemically produced resulting in a composition of amorphous alumina, an extremely hard substance
- Stable at temperatures in excess of melting point of aluminum
- Not only adheres to, but is a part of the flywheel, will not chip, peel or flake
- Hardness as shown by scratch test is between 7 and 9 on MOHS scale
- Sanford hardened surfaces do not have a calculable effect on fatigue life
- Results... a very hard, abrasive resistant surface.

TESTED AND APPROVED
FOR MOST ALL CARS

Effective February 1, 1959

LIST PRICE

\$39.50

including excise tax



WIL-CAP COMPANY

10215 S. San Pedro St., C-8, Phone: PLymouth 7-1777
Los Angeles 3, California

QUARTER & HALF MIDGET FIBERGLASS BODIES
READY-TO-INSTALL \$39.95 to \$65.50

"How to Build a Quarter

Midget"—\$1.00

Catalog 25¢

No C.O.D.

HAYMAN

FIBERGLASS

13502 ALBERTIS AVENUE

DEPT. CC-8 - NORWALK, CALIF.



JACKET EMBLEMS

LADY LINES

See catalog for all

embroidered and

6" Full Embroidery — 25¢

7" Full Embroidery — 50¢

10" Full Embroidery — 1.00

Emblems available in same

sizes at the same price.

Specify when ordering.

PERSONAL NAME EMBLEMS

Get embroidered on leatherbound White Seal

Now Order... 25¢

SEND NOW

for NEW completely

illustrated catalog, emblems,

services and measures—25¢

P. O. Box 66

Culver City 6, Calif.

SPOT ENTERPRISES

Vim and Vigor for the VW



and horsepower outputs on an engine dynamometer. Each of these testing methods has its own individual merits. When Harry Weber recently began a series of VW engine tests to determine the effectiveness of his and other VW special equipment, he chose to start by running an engine on the dynamometer his company maintains for this sort of thing. The results of the tests point out with clarity the limitations of stock VW engines and the advantages to be gained with the special equipment now available. These tests were conducted by Johnny Price, who has been with Weber for many years. Premium gasoline was used for the tests involving the blower and the Okrasa kit and regular was used for all other tests.

The engine used for the series was a 1956, 6.1 to 1 compression ratio model. Tests with seven different setups were made. The engine's condition for each test and the maximum horsepower and torque it developed on each test were as follows:

Test #1. The engine was completely stock in all respects. Horsepower was 30 at 3500 rpm and torque was 58 pounds-feet at 2000 rpm. The horsepower curve between 2500 and 3700 rpm was very flat. Total spread over this speed range was only 2.2 horsepower.

Test #2. The stock Solex carburetor was replaced with a Stromberg 81 carburetor made originally for 60 hp Ford V8 engines. This is a two-throat carburetor and it was necessary to make an adaptor for it to enable it to be fitted to the stock

intake manifold. The carburetor had .035 main metering jets and a number 72 pump jet. Mixture supplied to the engine by the carburetor with these jets was on the rich side, but as they were the smallest available, the mixture was made leaner by lowering the float level in the carburetor. Maximum horsepower was 33 at 3500 and maximum torque was 63 pounds-feet at 2000 rpm.

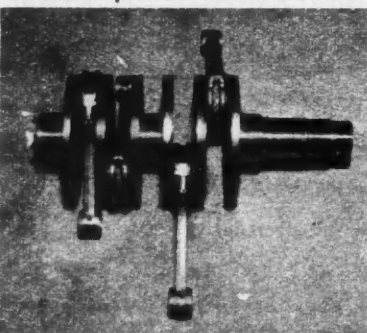
Test #3. A half-inch crankshaft and piston assembly and a camshaft reground to provide clearance for the longer stroke were installed in the engine. The additional stroke increased the engine's displacement to 86.5 cubic inches and raised its compression ratio to 7.07 to 1. In other respects—carburetion, ignition timing, etc.—the engine was stock. Maximum horsepower was 44 at 3700 rpm and maximum torque was 81 at 2000 rpm.

Test #4. The engine was exactly the same as for test #3 with the exception that its carburetor was replaced with the Stromberg 81 carburetor jetted and adjusted as before. Maximum horsepower was 47.5 at 3700 rpm and maximum torque was 85 pounds-feet at 2200 rpm.

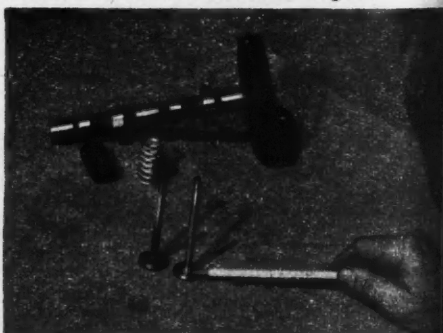
Test #5. The engine was the same as for test #4 with the exception that a Judson supercharger fitted with a stock carburetor was installed and the initial ignition timing was retarded to provide a maximum advance of 30 degrees. Maximum horsepower was 54 at 4200 rpm and torque was 81 pounds-feet at 2700 rpm.

Test #6. The stock carburetor on the Judson supercharger was re-

Weber Tool Co. stroked crankshaft for VW engine has circular arms between its crankpins. Rods on shaft were reworked to provide clearance in case.



Weber reground camshaft, stock and special valve springs, and standard VW valves. Head on valve at right was undercut to aid mixture flow to engine.



placed with the Stromberg 81 carburetor jetted and adjusted the same as for previous tests. Maximum horsepower was 54 at 4200 rpm and maximum torque was 90 pounds-feet at 2000 rpm.

Test #7. The engine was the same as for test #3 with the exception that a set of Okrasa heads and dual Stromberg 81 carburetors jetted and adjusted as for previous tests were installed. Ignition timing was adjusted to provide 32 degrees total advance. With the Okrasa heads the engine's compression ratio was boosted to 8.73 to 1. Maximum horsepower was 47 at 3700 rpm and torque was 85 pounds-feet at 2500 rpm.

Horsepower curves on the accompanying graph show some interesting things about the tests. The curve for test #1 shows the lowest power of all the curves throughout the entire range of engine speed. Test #2 shows a slight horsepower increase at low engine speeds with a wider margin of increase at the engine's peaking speed, which was the same as for test #1. This additional horsepower is attributable to the approximately double venturi area provided by the Stromberg two-throat carburetor over the stock Solex.

The curve for Test #3 shows greatly increased power at low speeds with the increase growing progressively greater as engine speed goes up. Peaking speed for this test was 200 rpm higher than it was for previous tests. This additional horsepower is attributable to the combination of displacement increase, which
(Continued on following page)

Standard VW piston at left and special stroker piston. Compression height and skirt of special piston are shorter than on stocker because of additional stroke.



AUGUST, 1959

LATEST REPORT ON THE RACE FOR SPACE!

Here are the newest, most authoritative facts and photos available on man's recent attempts to conquer outer space!



BONUS FEATURE:
A Special Chapter
on the Atlas!

ONLY
75c

AT YOUR
NEWSSTAND!

(or mail
this coupon.)

TREND BOOKS

5959 Hollywood Blvd., Los Angeles 28, Calif.

Enclosed is \$_____ for 85c each (covers postage, etc.) Please send _____ copies of
MISSILES AND SATELLITES TB-186.

(PLEASE PRINT)

NAME _____

ADDRESS _____

CITY _____

ZONE _____ STATE _____

AUTO PARTS & ACCESSORIES
FREE CATALOG!
Biggest Ever Printed—356 PAGES!

**Extra 32 Page Section of
Last Minute New 1959 Items**

**OVER 85,000 ITEMS
NOW IN STOCK**

Get this all-new edition of the world's largest and most complete auto equipment buying guide catalog—356 pages! Special 32 page section of brand new items! SAVES YOU up to 1/4 on all your automotive needs. See last minute releases of accessories and parts for your car, truck, hot rod, custom car or station wagon for early models through 1959! This new catalog features the latest Hollywood and Custom Equipment not yet in stores—New High Speed Parts—as well as hard-to-find replacement parts.

**Buy Direct by Mail from Whitney
—and SAVE MONEY**

Our tremendous buying power and huge volume enable us to offer you rock bottom prices. You actually save up to 50% and more! We stock over 85,000 items, ready for immediate shipment—with new, improved facilities to speed up service on every order. Our 25th year! Your satisfaction guaranteed on every order or your money back! Rush coupon for your FREE copy of our new 1959 catalog. Please enclose 25c in coin to help pay part of the handling and mailing costs (refunded on first \$5 or more order). Send for yours now!

This Coupon Brings FREE CATALOG

J. C. WHITNEY & CO.
1917 (C-8) Archer Ave., Chicago 16, Ill.

Please rush your giant 356-page Catalog describing world's most complete line of auto parts and accessories—over 85,000 items at lowest prices. (Please enclose 25c to cover part of cost, which will be credited to you on first \$5.00 order.) This Offer Good in U.S.A. Only.

Name _____

Address _____

City _____

Zone _____ State _____

SAVES YOU UP TO 50%

On Parts and Accessories for all makes,
years and models from 1920 through 1959
**EVERYTHING AUTOMOTIVE
FROM ONE SOURCE!**

MAIL COUPON TODAY!

J. C. Whitney, Inc. 1917 (C-8) Archer Ave. Chicago 16, Ill.

NEW 'RODDING & CUSTOMIZING' CATALOG

FREE

SAVE — ORDER DIRECT from Nation's largest supplier! 1000's latest Speed, Power, Mileage, Racing Equipment and Custom Accessories for ALL CARS! Lowest prices anywhere! Shows ALL brands plus "TOP TUNING TIPS" by Champion Don Garlits. Write ... it's FREE!

ALMQUIST

ENGINEERING, MILFORD, PA. Dept. CCC-8

SAVE UP TO 60%
ORDER DIRECT

train at home for BIG PAY



The amazing new CTI Home Training Plan is so practical it starts you earning spare-time money in weeks—makes you an expert 'auto mechanic in months. You get Mechanic's Tools and a professional Tune-Up Kit of test instruments. Extra training included in Diesel or Body & Fender Repair. Write today for new, free booklet.

COMMERCIAL TRADES INSTITUTE, DEPT. A-1091
1400 Greenleaf Avenue • Chicago 26, Illinois

QUARTER MIDGET BUILDERS, DEALERS AND OWNERS

Complete line of Continental Red Seal engines and parts in stock. Also clutches and wheels. Complete stocks of most other air-cooled engines and parts available. Robert Bosch and Lodge plugs for all cars and motorcycles.

Authorized Continental Distributor
MICHIGAN ENGINE SUPPLY AND SERVICE COMPANY

3811 Twelve Mile Road Berkley, Michigan

**IT'S THE SAFEST!
IT'S THE STURDIEST!
IT'S THE SPEEDIEST!**

EXCLUSIVE
DEALERSHIP
FRANCHISES
AVAILABLE



IT'S THE SPITFIRE 1/2 MIDGET!

Price with 3 HP Continental engine,
f.o.b. Rosemead, Calif. \$395.00

For information, write

DANCO CAR CO.

Dept. CC-8

9606 E. VALLEY BLVD., ROSEMEAD, CALIF.

TROPHY BUYERS!

If you are not buying direct from factory or manufacturer, you are paying too much. Why not check Christopher's rock bottom prices—Send 10¢ for new wholesale catalog.

CHRISTOPHER TROPHY CO.
1117 W. El Segundo Blvd., Dept. CC-8
Gardena, California

Vim and Vigor for the VW



resulted from installation of the stroked crankshaft, the higher compression ratio that automatically resulted from the larger displacement, and the improved valve timing provided by the reground camshaft.

The curve for test #4 follows the curve for test #3 quite closely but it is slightly higher at 2000 rpm and the difference increases to the peaking speed of 3700 rpm. This follows the trend set by the curves for test #1 and #2, and the higher power of test #4 is also the result of the additional venturi area of the Stromberg two-throat carburetor over that of the Solex.

The curve for test #5 starts at a lower rating than the curves for tests #3 and #4, although it is considerably higher than those for tests #1 and #2. This low initial output is undoubtedly due to the breathing restriction imposed by the supercharger and the small venturi of the Solex carburetor. The curve climbs rapidly as engine speed increases, indicating that the blower has taken effect, until it reaches the maximum horsepower developed during the series of tests.

The peaking point for curves 5 and 6 is 700 rpm higher than for curves 1, 2, and 7, and 500 rpm higher than for curves 3 and 4. The curve for test #7 represents the engine's best output in an unblown condition. It starts at the highest output of all and climbs rapidly to its peak at the same rpm as the curves for tests #1 and #2.

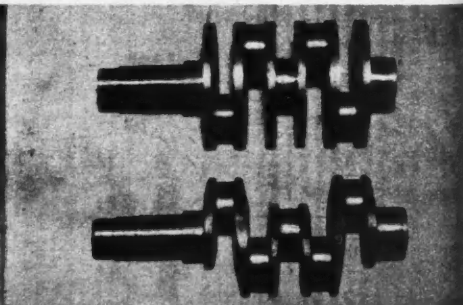
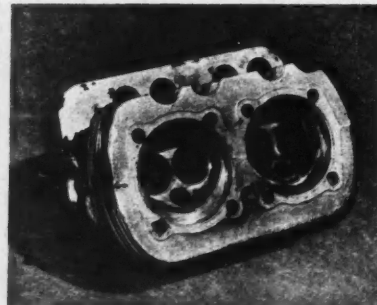
As can be seen by the curves, the horsepower for all tests except num-

bers 6 and 7 dropped rapidly after the peaking speed was reached. This was caused by the limited breathing of the stock cylinder heads and the Solex carburetor. The drop in test #8 was much less rapid due to the additional breathing capacity of the Stromberg carburetor. For test #7 the curve was quite flat from the peaking speed of 3500 rpm to 4500 rpm. This is where the additional breathing capacity of the Okrasa heads and the Stromberg carburetor made it possible for the greater piston displacement resulting from the longer stroke, and also for the higher compression ratio and longer valve timing, to be used to advantage. The higher peaking speeds for curves 5 and 7 were made possible by the forced breathing effected by the blower. Forcing the fuel and air mixture into the cylinders overcame some of the breathing restrictions inherent in the stock heads.

On-the-road experiences with one of the quarter-inch shafts in the VW that Tom Medley, who is advertising sales manager for one of our companion magazines, drives every day are quite enlightening. A certain hill in the Los Angeles area that Tom's VW would climb at 45 mph in stock form can now be stormed at 60 mph in the same gear. This is an increase of 33 percent in speed, which is almost unbelievable but true. Acceleration throughout the range from rest to top speed is much improved and top speed is five miles per hour higher than it was before. Tom wouldn't go back to stock now for the price of the car.

Stock cylinder head for VW engine is an aluminum casting. It has intake and exhaust valves of the same diameter, a single intake port for the two cylinders.

Weber stroked VW crankshaft above a stock shaft. Special shaft is a nodular-iron casting. It differs from the stock shaft in the shape of its crank arms.





THE KING OF THE PAINTERS



KRAZY SHIRTS

BE THE FIRST to get a Jeffries original shirt. Each one is born from Jeffries' crazy mind. Order now. State size \$5.25 ppd. No checks or C.O.D.

KRAZY STRIPING KITS used by Jeffries, the KING of the Painters. These brushes are from Germany, the country where Jeffries started painting. They made him KING OF THE PAINTERS.

TRANSPARENT CANDY COLOR PAINT

RED	\$22.50 gal. ppd.	PURPLE	\$22.50 gal. ppd.
BLUE	22.50 gal. ppd.	BURGUNDY	22.50 gal. ppd.
DARK GREEN	22.50 gal. ppd.	CLEAR	12.00 gal. ppd.
LIGHT GREEN	22.50 gal. ppd.	GOLD POWDER	7.00 2 lbs. ppd.

PEARLESCENT PAINT \$25.00 gallon mixed ppd.



Striping Paint \$2.00 per can



Car Name Brushes \$1.50

SPECIFY COLOR

NO C.O.D.

Striping Brushes \$1.50



Jeffries

NEW LOCATION

HO 5-2612 • 1526 N. IVAR & SUNSET
HOLLYWOOD 28, CALIF.

SPECIALIZING IN

Complete Auto Painting • Flaming, Striping, Paneling, Scalloping, Signs and Murals.



ONE WILL GET YOU

SPECIAL INTRODUCTORY OFFER
FOR NEW SUBSCRIBERS ONLY!

5 big issues of

HOT ROD
EVERYBODY'S AUTOMOTIVE MAGAZINE



- 1 WORLD'S BEST AUTO TESTS
- 2 LATEST RODS, CUSTOMS, BOATS
- 3 TOP COVERAGE COMPETITION EVENTS
- 4 TIPS FOR ROD BUILDERS
- 5 HOW-TO-DO-IT TECHNICAL FEATURES

HOT ROD DEPT. CC-8 3959 Hollywood Blvd., Los Angeles 28, Calif.

CLIP
AND
MAIL
THIS
COUPON
TODAY!

Here's my dollar. Please send me the
next five issues of HOT ROD.

(Please print)
NAME _____

ADDRESS _____

CITY _____

ZONE _____ STATE _____

1/4 - 1/2 MIDGET BULLETIN BOARD

ALL CALIFORNIA INVATIONALS SLATED FOR LABOR DAY

Northern California's active Redwood Quarter Midget Association has just announced their scheduled three-day All-California Invationals race meet slated for Labor Day - September 5th, 6th, and 7th. Their Bayshore located track will open Saturday, Sept. 5th, for early morning practice with qualifying commencing later in the day. Early Sunday morning will also be set aside for time trials. Races will start promptly at 11:00 A.M. Sunday and terminate no later than 9:00 P.M. This schedule will allow out-of-town entrants to use Monday in returning home. Racing divisions will be the same as previous invational or national events; Stock, Modified Stock, "B" Modified, Open Gas, Open Fuel. Junior (4-8 yrs.) and Senior (9-15 yrs.) classifications will only be employed for Stock Modified Stock, and "B" Modified divisions. Open Gas and Open Fuel will be 4 to 15 year old drivers inclusive. Redwood's asphalt track is 1/10th of a mile in length boasting of 68 foot straightaways with 15 foot radiused turns banked some fifteen inches. Track width is 32 feet in turns as well as in the straights. Northern California Quarter Midget specifications will prevail.

ENGINE SPECIFICATIONS:

STOCK: Junior Divisions age 4 through 8 - Senior Division age 9 through 15. FUEL: Gasoline only, no additives. ENGINE: 7.3 cu. in., air-cooled, 4 cycle engines in this division must remain stock except for the following: Valve-kits may be installed so long as valves are of stock dimension. Valve guides may be installed. Flanged exhaust pipes may be installed but threads may not be removed. Ignition timing may be changed at points only. You may relocate the point cam and install Allen screw. Breathers may be installed. Dipper modifications allowed. Additional holes in pan allowed. Nuts, bolts, studs, washers, gaskets (other than head gaskets), governor, pulley, screen, air cleaner, gas lines, exhaust pipe, points, and condensor not to be classed as part of engine.

MODIFIED STOCK:

Junior Divisions age 4 through 8. Senior Division age 9 through 15. FUEL: gasoline only, no additives. ENGINE: 7.3 cu. in., air-cooled, 4 cycle. All modifications allowed in this division except for the following: Stock head, no milling allowed, stock head gasket, stock part size, no polishing allowed, stock valve size (at head), stock compression, stock cam-shaft, (AU7/216) for Continental no alterations allowed. Threads may be removed from exhaust part and flange installed. Fly-wheel must be 95% of manufacturers weight with min. weight being 27 oz.

"B" MODIFIED

Junior Division age 4 through 8. Senior Division age 9 through 15. FUEL: Gasoline only, no additives. ENGINE: 7.5 cu. in., air-cooled, 4 cycle. All modifications allowed in this division except for the following: No alterations of stock cam-shaft, flywheel must be 95% of manufacturers weight with min. weight being 27 oz.

A GAS:

Ages 4 through 15. Engine displacement must not exceed 8.0 cu. inches. Gasoline only, to be furnished at meet.

AA OPEN FUEL:

Ages 4 through 15. Engine displacement must not exceed 8.3 cubic inches. Fuel (straight methanol) or gasoline furnished at meet.

NOTE: Gear-boxes are not considered a part of the engine in any division, therefore any type gear reduction allowed. All divisions, one wheel drive only. No over-head valves. No blowers. No fuel injection.

GENERAL REGULATIONS:

1. Wheelbase shall be a min. of 40" max. 50". Max. over-all length 76".
2. Wheel tread 28" min. 32" max. center to center of tires.
3. Belly pan ground clearance max. 2 1/2" at front axle 3 1/2" at rear axle.
4. Height shall be a max of 28" not including roll bar.
5. Tire size min. 8" dia. 12" dia.
6. Gear ratio min. 8 to 1.
7. Steering must be direct, no cable.
8. Frame, must be all metal.
9. Fire-wall, all metal min. thickness .050"

between driver and engine. 10. Off to on ignition switch required, located left side of cowl, off to rear. 11. One wheel brake, min. required. 12. Drive-chain must be covered, or placed so as not to be exposed to driver or handler. 13. Crash guards must be strong enough to be used by handlers to start car. Bumpers shall be constructed so as to prevent hooking or lifting. 14. Roll-bars: mandatory. Can be made of 3/8" cold roll, or 3/4" OD pipe with a min. wall thickness of 1/16" also shall be an open loop, no bracing which can strike driver's neck. It shall be fastened to the frame or firewall (no slip-tubes unless keyed). Height shall be a min. of 1" above the driver's helmet. Three main purposes of the roll-bar are to prevent drivers head from slipping into the loop, to prevent the car from rolling over, and to keep the weight of car off driver should he or she flip. 15. All cars must have a web type safety belt with quick release buckle, securely fastened to the frame, drivers will be required to use them at all times. Belt should be located so that the pressure is across the hips. 16. Drivers are required to wear a well fitted, professional type crash helmet, approved by tech. comm. 17. Goggles must be unbreakable, no metal frames, approved by tech. comm. 18. Fuel lines must be automotive type fittings, or positive clamps. 19. All three place winners may be torn down by tech. comm. immediately following race. Race results not official till after tear down. 20. All engines, all classes, 4 cycle, no overheads, no blowers. 21. Gas tanks cannot be fastened to engine, and must be vented to outside of car. 22. Weight car only, min. 150 lbs. max. 225 lbs. 23. Any car leaking gas or oil, or otherwise deemed unsafe, may be ruled from track by starter, judge, referee or tech. comm. 24. Exhaust systems shall not be higher than rear tire, must not extend past rear bumper, and may not exceed outside of a straight edge laid on rear edge of rear tire and extreme rear of rear bumper.

All additional inquiries should be directed to Redwood Quarter Midget Association, Dick Faucett, 452 Larkspur Drive, Palo Alto, Calif.

TRACK LISTINGS

SAN DIEGO, CALIFORNIA

Quarter Midget Racing Association

TRACK: asphalt. RACE DATE: every Sunday 1:30 p.m. first race. QUALIFYING: starts at 10:30 a.m. RACING CLASSIFICATIONS: Novice, Stock, "B" Modified, Junior (4-8) and senior (9-15) in all divisions. GENERAL RULES AND REGULATIONS: all cars must be equipped with following safety features: approved roll bar safety belts, bumper front and rear, one wheel brake, outside ignition switch, metal fire wall and metal frame. DRIVER: approved crash helmet, unbreakable goggles, leather or other

adequate long sleeved protective apparel. ENGINE SPECIFICATIONS: four cycle only, American manufactured (any foreign made engines must be approved by technical crew). "Novice" class—no engine modifications allowed. "Stock" class—stock engine (7.3 cubic inches), only listed parts for engine series may be used. "B" Modified class—7.5 cubic inch. FUEL: gas only —furnished at the track for all classes. TRACK LOCATION: Highland and "C" St., National City, California.

A group of young chargers tour banked clay oval at Portland's indoor quarter midget race track. Spectators are seated in balcony that surrounds the oval. The NWQM association boasts 52 cars; display their best for Sunday Television.





Larc-Douglas' new "West Coast" quarter midget has all trimmings and race-bred designed for mechanical and outward appearances. Note hinged hood.

LARC-DOUGLAS "WEST COAST" QUARTER

Latest scaled-down miniature race car to roll from the portals of the Larc-Douglas plant in New York is the new "West Coast" quarter midget. All new fiberglass racing shell features hinged hood section, robust roll bar, and rolled and pleated cockpit upholstery. Mechanical features are: front and rear suspension systems controlled by adjustable shocks, rack and pinion steering, and hydraulic brakes at rear wheels. Exterior appearance of the pint-size speedster is enhanced with race-bred features of chromed nerf bars all around, grille, fake exhaust pipes, and knock-off wheel hubs. Further information can be procured by writing: Larc-Douglas, Inc., 18 Genevieve Place, Great Neck, New York.

INDOOR RACING FOR OREGON

Old man weather cannot affect the quarter midget racing activity of Portland's North West Quarter Midget Clubs, Inc. When this active group of fifty-two cars wish to race — they just race whether sunshine or rain prevails. All this is due to their indoor racing track located on the grounds of the Hill Military Academy. Spectators are furnished with balcony seating while drivers duel it out on the $\frac{1}{20}$ of a mile clay oval on the floor below. Summer months are especially interesting to all participants, whereby a weekly television program originated from the race site sponsored by the Meadows Pontiac Automobile Agency. So-called "Phoenix" rules are employed for all races concerning engine

specifications; track record 7.96 for the dustless oval. Out-of-town visitors are welcome to participate, but must abide by the association's rules and regulations. For information write: North West Quarter Midget Clubs, Inc., 2035 N.E. Columbia Boulevard, Portland 11, Oregon.

CALLING ALL $\frac{1}{4}$ - $\frac{1}{2}$ MIDGET ASSOCIATIONS

Many quarter and half midget enthusiasts have requested a national listing of quarter and half midget race tracks. The purpose of such a track listing would afford many racing enthusiasts the chance to compete at outlying tracks, even out-of-state tracks, while on vacations, once they had general information regarding other association's operation procedures. Commencing with this month's "Bulletin Board" you will find our first listing. The placement of the listing is such that it can easily be clipped from the page so that a record of the tracks can be kept as they appear each month. All quarter and half midget associations are urged to send their listings in to the "Bulletin Board" for further publication. Information should concern itself with the track's location, race dates, racing divisions or classifications, start of qualifying times and first race, association's engine specifications for individual classes, and general rules and regulations concerning race cars, drivers. If the location of your track is somewhat complex it is suggested that you furnish a concise report on how to arrive at the location by simple directions. Send in your track listing today — address all listings to: " $\frac{1}{4}$ - $\frac{1}{2}$ MIDGET BULLETIN BOARD," CAR CRAFT MAGAZINE, 5959 Hollywood Blvd., Los Angeles 28, California.

NOTICE — ALL ASSOCIATIONS

CAR CRAFT magazine's new " $\frac{1}{4}$ - $\frac{1}{2}$ Midget Bulletin Board" is read by every quarter and half midget enthusiast from East to West. Due to this national following many associations have been submitting announcements of national and special events for publication. We are more than happy to be of service to all associations, that's the prime reasoning behind the inception of the "Bulletin Board," but many of these announcements have been arriving in the mail too late for us to publicize the event. This is due to the magazine's early monthly deadline. In the future, Associations wishing to publish pre-release announcements of forthcoming national championship events, or special meets, in CAR CRAFT magazine's quarter and half midget "Bulletin Board" should submit copy ninety days prior to event's scheduled dates. Direct all notices to: " $\frac{1}{4}$ - $\frac{1}{2}$ MIDGET BULLETIN BOARD," CAR CRAFT MAGAZINE, 5959 Hollywood Boulevard, Los Angeles 28, Calif.

HAL MOODY'S



SILVER SLICK-RACING TIRES FOR
• $\frac{1}{4}$ • $\frac{1}{2}$ • MICRO MIDGET and GO CARTS

DIAMETER	WHEEL SIZE	TREAD WIDTH
10"	5"	3 $\frac{1}{2}$ "
11 $\frac{1}{2}$ "	5"	4"
12"	6"	4"
14"	6"	4 $\frac{1}{2}$ "
18"	8"	5 $\frac{1}{4}$ "

PRECISION-BUFFED — BUILT AND CURED
TO A PERFECT CIRCLE

Dealer inquiries invited

HAL MOODY'S TIRE SERVICE

4698 San Fernando Road • Dept. CC-8
Glendale, California

REUPHOLSTER with a BRUSH!



Renew dull, faded, worn leather or vinyl plastic upholstery. Car, plane or boat seats, headliners, sidepanels will look new in any color. Redesign, customize new or used interiors. You can change color too! Easily applied brush or spray. RamCote Flexible Finishes

(not a paint) impregnates leather or vinyl plastic upholstery. Won't chip or peel. Fadeproof, waterproof. Use on home & lawn furniture. Write for free information, color chart, and dealer location.

RAMCOTE, 1141 W. 89th St.
Chicago 21, Ill., Dept. CC

RAMCOTE
FLEXIBLE
FINISHES
Restores — Colors
Protects — Leather
Leatherette or
Vinyl Plastic

Sensational New VIKING CRAFT

INDIANAPOLIS TYPE $\frac{1}{4}$ MIDGET

\$495.00

(f.o.b. Anaheim, Calif.)
cars complete
in every
detail



The oldest manufacturer now presents the newest in $\frac{1}{4}$ midgets. Features 45" wheelbase, high and low torsion bar suspension, LOW CENTER OF GRAVITY, the UTMOST in DRIVER PROTECTION. Comfortably handles

drivers 6-16 years old. Send 25c for literature today. Exclusive franchised dealerships available.

VIKING CRAFT

510 East Julian Street, Anaheim, California





FREE!
SPECIAL EDITION

sent FREE with order for any item from this ad (otherwise send only 25c to cover mailing.)

NEW GIANT CATALOG

Includes over 10,000 items from our stock of over 150,000 items. Most not available in regular Auto Parts Stores. Lowest prices in our history. Order your catalog today.

SAVE NOW... ORDER THESE ITEMS TODAY

SKID-MASTER makes your car safe... more comfortable. Counteracts skids, reduces vibration, improves braking. Counter weight floats in oil, held on center by powerful tension springs. \$39.95 value for only \$12.95.



RESERVE FUEL TANK mounts under hood... holds 3 1/2 gal. emergency fuel. Out of gas? Just turn the auxiliary valve. Complete with tank, fuel filter, shut-off valve, flexible hose and brackets. Terrific value \$4.95 ppd.

Deluxe MILEAGE-HINDER Fuel Pressure Regulator... Neoprene Diaphragm, also Trouble Trap, plus Powerful Magnet to capture iron oxides, rust flakes, etc., that clog carb needle. Complete with fittings. Only \$6.95 ppd.



LEFT FOOT ACCELERATOR With LEFT FOOT THROTTLE you can use either foot on accelerator. Lets you ease off on gas as you apply brake, stop quicker and smoother. Reduces fatigue, avoids leg cramps on long trips. Only \$3.95 ppd.

"AUTO-TIMER" Spark Selector. Get more POWER, up to 20% MORE gas mileage, quicker starting. Adjust spark instantly from your dash for all driving conditions. Triple chromed. Only \$6.95 postpaid. Great item.

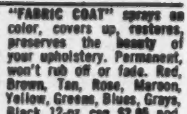


NEW CHROME KITS \$4.95

"PERMA-BRONZE" Filter lasts FOREVER. (Rinse and it's like new). SAVE MONEY... oil lasts LONGER, engine lasts longer. By-Pass element \$4.95. Full-Flow \$6.95. Complete Filter (with new case) \$12.95 postpaid.



POROUS BRONZE OIL FILTER



ELECTRONIC SPEED-ALARM only \$6.95 ppd. Specify 6-12 Volt

SPEED-ALARM can save costly fines. Set control knob to maximum speed you wish to observe. Red light flashes warning, no disturbing buzz, no loss of speed when you need it. No holes to drill. Only \$9.95 ppd.



TAYLOR ALTIMETER... great for trips... Now "steep" the hills, how deep the valleys. Also Barometer. Complete... no wires to connect. 0-5000 ft. \$8.95; 0-10,000 or 0-15,000 ft. \$10.95 postpaid. Wonderful.

PLASTIC STEEL (20% plastic, 80% steel) handles like putty, hardens into steel. Sticks to anything. For repairing pipes, faucets, lawn mowers, furniture, engine blocks, gas tanks, anything. Complete kit \$2.95 ppd.



NEWHOUSE... WORLD'S LARGEST
Over 150,000 Special Auto Parts in Stock
SATISFACTION GUARANTEED OR YOUR MONEY BACK

**NOT \$4.95
NOT \$3.95
NOT EVEN \$2.95
... ONLY \$2.45**



WHY PAY MORE? Engine suffering from "acid indigestion"?—oil swarming with tiny abrasive flecks? Replace your crankcase drain plug with low cost, effective NEUTRA-PLUG. Has (A) Active-Magnesium alloy to neutralize acids, (B) Alnico magnet to trap metal particles, (C) Self-sealing threads and gasket to prevent leaks. Equal to others costing up to \$4.95. AMAZING NEUTRA-PLUG only \$2.45. DELUXE model only \$2.95 ppd.

GOLD or CHROME metal-like "Mylar" sticks where put. Will never tarnish or fade. For body trim, door, dash, kick panels, etc. Fine 2 1/2" x 5" \$1.79, 1 ft. \$3.95, 2 ft. \$7.95, 5 ft. \$18.95 Specify Color. Ppd.



JAHN'S PISTONS

JAHN'S are world-famous for precision engineering. Every piston is cam ground and double-checked. Specify Racing or Regular High Performance. Made for all engines, in all over-bores. From \$6.95 per piston ppd.

GRANT PISTON RINGS are used in the world's fastest cars, boats, planes. Available for all makes of engines. Full sets \$8.97 up, send \$4.00 deposit and full information. We will ship at lowest price possible.



GRILLE BARS—Clean lines of Round Chrome tubing (not cheap "U" bars). Sweep all the way across, curve beautifully at each side. 1955-59 Chevy, '52-58 Ford, '55-56 Plymouth. New low price, \$29.95 complete.

AIRPLANE-TYPE "TRIPLE-FIRE" SPARK PLUGS give up to 30 more HP, greater mileage, faster acceleration. Outlast "old-style" plugs 3 to 1. New cooling fins, extra-rugged insulators, one-piece shell. \$1.10 each, set of 8 \$9.95 ppd.



MANIFOLDS... Off-hooder 53-59 Buick, ALL Cords, Olds, 6-Log (shown) \$74.95. Edelbrock 54-57 Ford, Merc, Dual-Triple (or 6-Carb) \$69.95. Weiland Chev V-8 Dual-Triple \$79.95. Grazer 49-56 Cad, Olds, 4-Carb \$89.95.

BRAND NEW (not rebuilt) STROMBERG, ROCHESTER, HOLLEY for most cars. Replace that old carb... get more power on less gas. Holley \$27.50, Stromberg "97" \$22.10, "AAV" \$26.95, Buick \$38.75, Chevy 6-bolt \$22.95, Chevy 6 \$23.95.



COIL BOOSTER \$1.98

ELECTRONIC COIL BOOSTER intensifies high voltage, gives much hotter spark for better combustion, MILEAGE, POWER. Increases efficiency of spark plugs up to 50%. Fits any car in 60 seconds. Only \$1.98 ppd.

RUSH ORDER COUPON

NAME..... (Print)

ADDRESS.....

CITY.....ZONE.....STATE.....

You need send only 20% with Coupon... we will ship C.O.D. for the balance. Satisfaction guaranteed.

Car Make.....Year.....Model.....No. Cyl.....

Enclosed please find \$.....

SEND ITEMS BELOW AT ONCE:

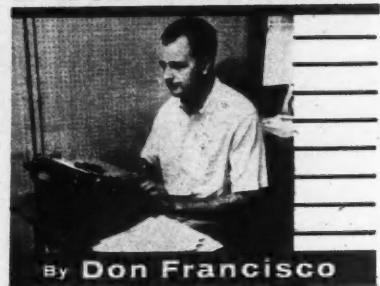
Quantity	Description—Give Info	Price

Calif. residents add 4% sales tax.

Newhouse
AUTOMOTIVE INDUSTRIES
BE SHIP ALL OVER THE WORLD

5005 E. Beverly Blvd., Dept. 160, Los Angeles 22, Calif.

WHAT'S YOUR PROBLEM?



By Don Francisco

HIGH CAPACITY PUMP

Dear Don:

I would like to install a 1958 or '59 six-valve Chevrolet fuel pump on a 1958 Chevy engine that has three two-throat carburetors. My problem is that I don't know where to hook the vacuum line for the carburetors. This isn't the vacuum line that opens the throttle valves for the end carburetors, but the one for the middle carburetor itself.

On the pump now on the engine there are two vacuum lines and on the six-valve pump there are no vacuum lines. So what do I do?

—Tom Miller
Omaha, Nebraska

I'm afraid you're a little confused about the purpose of the vacuum lines that connect to the fuel pump on your car.

Some early production 1958 Chevrolet engines, which yours must be, were equipped with combination fuel and vacuum pumps. The purpose of the vacuum side of combination pumps is to provide a source of vacuum for the car's windshield wiper motors when the engine is running under conditions of low manifold vacuum. The inlet side of the vacuum pump is connected to the wiper motors and the outlet side is connected to the engine's intake manifold. The pump is capable of creating sufficient vacuum to operate the wipers at a reasonable speed during periods when there isn't enough vacuum in the intake manifold to operate them.

High-capacity six-valve fuel pumps used on some Chevrolet engines do not have vacuum pumps. To install a pump of this type on an engine that has a combination pump, connect the vacuum line from the windshield wiper motors directly to the opening in the intake manifold to which the line from the vacuum pump was connected.

Inlet and outlet openings in six-valve pumps have a 1/4-inch pipe thread instead of the 1/2-inch thread used in standard pumps. This will require a new flexible hose of the correct type between the pump and the line from the tank and some sort of change in the fitting that connects the pump to the line to the carburetor. Whenever special fittings are used at these points care must be taken to guarantee that they don't restrict the pump's inlet and outlet openings if the pump is to be expected to deliver its full capacity.

STOCK PARTS

Dear Don:

I am installing a '52 Cadillac engine in a '48 Ford coupe, using a '36 Ford transmission and a Columbia two-speed rear end.

What kind of flywheel, clutch, and pressure plate would be most practical for this installation? If possible, I would like to use an 11-inch Ford clutch.

—Dale C. Hanrahan
Camp Pendleton, Calif.

The recommended flywheel and clutch combination for the installation you are making is a stock Cadillac or Olds clutch-type flywheel and a Ford truck 11-inch pressure plate assembly and driven disc.

ELASTIC TRANSMISSION

Dear Don:

Could you please set my friends, or me, straight on something concerning transmissions? I have a '55 Buick-powered '32 Ford and from the way my friends talk the Ford transmission now in the car is no better than a big elastic band.

With a Ford 11-inch truck clutch and Zephyr transmission gears turning the 4.11 gears in the car's rear end, will I have "go" or will there be teeth scattered from here to there?

—Kent Telford
Salt Lake City, Utah

I don't quite understand the comparison of the Ford transmission to an elastic band because any synchromesh transmission will transmit torque just as positively as any other transmission of the same type. However, transmissions do vary in the amount or torque they are capable of transmitting without losing the teeth on their gears or possibly breaking their case.

The life expectancy of a Ford transmission behind a Buick engine would depend on how the car was driven. It is entirely likely that the transmission wouldn't last too long if the car were used for drag racing or if it were abused by continual starts from rest in second gear or in some other manner. The trend nowadays is to use huskier transmissions, such as Cad-LaSalle, Packard, or similar boxes, behind large displacement overhead engines. Unfortunately, these transmissions are becoming scarcer by the hour, and as they become scarcer, they become more expensive.

CHEVROLET IMPROVEMENT

Dear Don:

I have a 1955 Chevy that has a V8 engine and a stick-shift. I'm thinking about installing a '58 Corvette engine, which I can buy for \$75.00, in the car.

Would this be a hard swap? What changes would have to be made? Would the results be worth the effort?

—Dave Kicsi
Grosse Pt., Mich.

This would be an extremely simple engine switch. Basically, engines used in Corvettes are identical to those used in passenger cars. Corvette engines have a different front motor mount arrangement but the mounts on the engine now in your car can be installed on the Corvette engine.

Most Corvettes have a high-capacity six-valve fuel pump which has a 1/4-inch pipe thread in its inlet instead of the 1/8-inch inlet in passenger car pumps. A new flexible hose between the chassis' fuel line and the pump will take care of this. Exhaust manifolds on all Chevy engines were improved after your car was built but the most trouble this could cause would be the installation of new head pipes between the exhaust manifolds and the car's mufflers.

There were several different Corvette engines available in 1958 but I think any one of them would provide a definite performance improvement over your present engine, making the change well worth whatever problems it might present.

HOT COIL

Dear Don:

I have a stock '40 Ford which is in fair condition. I have a problem with the car and that is that it is always melting its ignition coil. I installed a new distributor but when I tried to start the engine, the coil split wide open.

I would appreciate it if you could tell me what is causing the coil trouble?

—Doug Smith
Hudson Bay, Sask.

Assuming you are using a stock coil, I would say that your trouble is probably caused in one way or another by the ignition circuit's resistor. The primary circuit of all Fords that have flat-head engines and stock distributor coils must have a resistor between the car's ignition switch and the coil. The purpose of the resistor is to drop the voltage in the circuit from the six volts delivered by the battery to approximately four volts. Without the resistor, it is possible for the current that flows through the circuit when the distributor points are closed to cause the coil to overheat.

The resistor in your car should be mounted on the passenger side of the firewall. A wire from the "Ign." or "Coil" terminal of the ignition switch goes to one side of the resistor and another wire runs from the resistor's other terminal post to the "Bat." terminal on the coil. Check the resistor in your car to be sure it is wired in this manner. It is possible that the resistor became defective and someone placed the wire from the ignition switch on the same post with the wire to the coil. This would eliminate the resistor from the circuit. Or, someone may have run a new wire from the ignition switch directly to the coil. If either of these things should prove to be the case get a new resistor from your local Ford dealer and install it in the primary circuit.

It isn't necessary for the resistor to be mounted on the firewall. Resistors used for Fords of some models can be mounted directly on the coil. This is done by connecting one end of the resistor to the terminal post on the coil and then connecting the wire from the ignition switch to the resistor's other post. When you install the resistor, be sure it's the only one in the circuit.

NOW AVAILABLE FOR GAS CARTS
1/2 and 1/4 MIDGETS, etc.
CUSTOM STEERING WHEEL Black finish. Easy install. 1/2 or 1/4" dia.
shaft sizes. 10¢ for literature. Disc. to Dealers & Mfrs.
STEERITE PRODUCTS
Dept. CC-8
Box 221, Long Branch, N.J.

NEW!
FIBERGLASS SPORTS CAR BODY
Fits all 114" to 117" Wheel Bases. It's a Roadster or a Hardtop.
2-pc. Hardtop fits into trunk!
Send 50¢ Today for illus. Brochure and Instruction Plans.
SAVAGE SPORTS CAR MFG. CO.
Only \$595
316 S. Mariposa L. A. 5, Calif.

COMING IN

SEPTEMBER

CAR CRAFT

"Rolled Pans"—

Latest Twist in
Exterior Styling!

ON
SALE
AUGUST

6

NATIONAL Q.M. DISTRIBUTOR



New, lighter, tubular steel connecting rod for A17 Continental Motor. Made from 4140 steel forging heat treated to 30 rock-well.

Vern Gardner is the world's foremost 1/4 and 1/2 midsize and parts distributor, stocking first quality brand names as Buco Slicks, Motol Helms, Boomer Helms, Continental Engines, Amal, De Lorto, Corvelli, Selt and many, many others.

Write today for free information... dealer inquiries invited.

Vern Gardner

4418 E. 14TH STREET (DEPT. CC-8)
OAKLAND 1, CALIFORNIA



POMOCO SWITCHEROO

Dear George:

Planning alterations on my '55 Ford has left me with many questions. Since much of my inspiration for customizing is found within the pages of *Car Craft* magazine, I am turning to you for the answers.

To lower the Ford three inches, how many turns must I cut from the coil springs? To enhance the lower profiles, I think that the 15-inch '57 Ford wheels would be sharp. The only problem: will they fit?

I have seen '55 Mercury station wagon taillights in other '55 Fords. How much of a job is it to install them, and how do I do it? Finally, will a Fairlane trunk lock assembly fit my Ford?

—Fred Freely,
Grand Rapids, Mich.

You'll find that each turn of the coil springs will equal just about 1½ inches. Therefore, to lower your Ford 3 inches, you'll have to remove two turns from the coil springs with a torch.

For wheels, simply take the old '55 wheels off and bolt on the '57 wheels. They're both identical in lug patterns. For those Merc taillights, I suggest that you check out the March '56 issue of *Car Craft* for the complete information on how to perform this switch. Briefly, however, the steps are: removing the complete Ford assembly from the fender. Then, check the alignment of the Merc light against the fender. You'll have to remove a small section of the fender panel behind the light, so mark this off along with the bolt holes for the new light. After removing the metal, you'll have to glue a set of Ford seals to the Mercury light. Following this and final alignment, you connect the wires and securely attach the light to the fender. It's a sharp conversion and is a natural for the '55 Ford.

The lock assembly won't cause you any fuss either. You'll just have to trim and adapt to fit the trunk; it'll be a minimum of work on the attaching assembly.

IDEAS FOR BUICK GRILLES

Dear George:

I am planning on building my first custom, with my '58 Buick as the foundation. I have been finding many of my ideas in *Car Craft*, but seem to be stuck for an adequate grille.

I plan on using '56 Packard taillights in the rear, will probably french them to the fender. I'm going to get rid of all the chrome on the body, including the door handles. I'll replace them with an electric solenoid system. For the ground-hugging appearance, I'll lower the Buick about 2½" in front and 3½" in the rear.

With these alterations, what type grille would look good?

—David Roberts,
Bradenton, Florida

There are a number of designs that will give a sharp appearance to the front end of your Buick. The only trouble is that you will have to build the grille up from scratch as there aren't any neat grille switches from other cars.

You might give some thought to one of the special tubular grille assemblies which are available at a number of accessory houses, there's probably one near you. If you don't care for this style, you could build your own from tubes with flat stock for brackets. You could use tubes of the same size in diameter, or you could vary the appearance by using different sizes.

A second choice would be to employ expanded or perforated metal. Cut it to fit the grille opening then use small L-shaped brackets and metal screws to install. You can get original and install bolt-on chrome bullets (accessory) on the screen or hardware drawer knobs or pulls. This is the latest fad for custom grilles.

STRAIGHT-BAR GRILLES FOR '57 CHEVS

Dear George:

I've been looking for a straight-bar grille similar to those manufactured for '55-'56 and '58 models but can't seem to locate the product. Is there a grille manufacturer that makes this particular grille assembly?

—John North,
Bellmore, L.I. New York

This question has been asked by a number of fellows, John. There are a number of top accessory manufacturers who make these straight-bar grilles. Detroit Grille Co. manufactures this particular product, and I suggest you contact them. Their address is 258 East Vernor Highway, Detroit 1, Michigan. You might also contact both California Custom Accessories, 1807 West 65th Street, Los Angeles 47, California, and Pan-O-Rama Grilles, 121 West Linden Avenue, Burbank, California. I'm sure that you will find what you are looking for by writing these companies for illustrated brochures.

MERC MODERNIZATION

Dear George:

I own a '51 Merc which is semi-customized. Though I don't want to do a full custom job, I do want to substitute a one-piece windshield for the two-piece assembly which is now present.

Are there any that will fit?

—Leonard Slisz,
Buffalo, New York

There aren't any windshields that will fit your Merc, Leonard. You'll have to take it to a glass shop and have the two-piece windshield "V" butted and sealed with clear plastic. You can do it yourself, but it's quite a job for one not accustomed to glass work.

GRILLE REPLACEMENT

Dear George:

I want to replace the center bar of the grille on my '56 Plymouth. Is there a straight bar that will bolt-in, or will I have to fabricate my own from sheet metal?

—Raymond Eilers,
Springfield, Ill.

There is a grille bar that would look very nice in your Plymouth, Ray. It's the accessory bar for the '52 Ford, manufactured by California Custom Grilles. You'll have to trim the ends slightly to make it fit the grille cavity, but the small amount of work makes this your best bet.

PLASTIC TAILLIGHTS

Dear George:

I am interested in creating some plastic taillight lenses for my '57 Ford convertible. I have seen some of this work on other custom cars and from all outward appearances, they look to be fairly simple to build. Can you give me any information along this line?

—Bernie Johnson
Manchester, Conn.

More and more custom enthusiasts are taking advantage of this new idea of building plastic taillights mainly because they are fairly simple as you have said. The major problem which has confronted the customizers is the availability of the red or clear plastic. Most of the Southern California shops rely upon Fry Plastics, 7826 South Vermont Ave., Los Angeles, Calif. They have just about everything in stock.

If you are really interested there has been a complete series of features on plastic customizing in our companion magazine, *Custom Cars*. The issues, available by writing to this address: 5959 Hollywood Blvd., Hollywood 28, California and enclosing a quarter for each issue desired, are: March, April, May and June of '59. They contain the very latest ideas and styles, and show you the step by step operations that are needed to construct the many plastic components.

HOW-TO-CUSTOM OLDS

Dear George:

I'm the owner of a 1958 Olds convertible, and I would like to know if you have any suggestions on how to customize it?

—Gary Bellaver
Detroit 27, Michigan

First, you should install a mesh-type grille, or you could take the '54 Chevy grille with added teeth and bolt into its place. Also remove all of the unnecessary outside medallions. Lower it 2-inches then, install the lenses from a '59 Cadillac on your original lenses. Then to finish it off get a sharp looking paint job.

"CAR CLUB OF THE YEAR"



Car Craft Magazine's Annual Contest Commences For Top Car Club Of The Nation

INIITIATIVE, ROLLING STOCK, and activity. These are the prime factors of judging in CAR CRAFT magazine's second annual "CAR CLUB OF THE YEAR" contest. Any car club is eligible; judging is based on quality and not quantity—so even if your club is small in the amount of active members, let's see what you have and what you have accomplished these past twelve months.

The large silver bowl is one of the most prized awards that a car club could add to their club's trophy collection. The winning car club receives not only this coveted silver cup distinguishing their group as the best in the nation—but also a full editorial feature in the January issue of CAR CRAFT magazine on each member and his car.

There are five requisites which your club must fulfill to be an eligible entrant.

1. Obtain a snapshot photograph of each member's car.
2. Make a list of the Club's activity during the past year and briefly describe each event.
3. List all achievements of club group participation. Example: "Our club won best display award at Autorama—Our club entry voted best appearing car and crew at drags."
4. List all achievements of individual members attained with the cars such as—"Ron Smith won four trophies this year with his '49 Chevrolet; three 1st place awards—Motorama, Autorama, National Roadster Show—one 2nd place award—Clutcher's Rod & Custom Show." "Joe Smith won ten trophies in "B" Gas class at local drags this last year."
5. List all club activity and achievements of non-automotive nature such as—"Our club solicited for the City of Hope fund drive this summer raising some two thousand dollars—we assisted our police department in their traffic safety campaign—we were awarded the Junior Chamber of Commerce plaque for safe driving."

Once you have the above information compiled in a neat manner, send it to: CAR CRAFT MAGAZINE "Car Club Of The Year," 5959 Hollywood Boulevard, Los Angeles 28, California. Be sure that you include sufficient postage for return of the material. Entries must be postmarked no later than midnight of September 30th, in order to make your club eligible for the contest. All entries received after this date will be ineligible and returned.

The winning car club will be announced in the January, '60 edition of Car Craft, which will be on your newsstand early in December. Remember—every club is eligible. The only way that your car club is guaranteed of losing is by not entering! **DO IT NOW!**

AUGUST, 1959

MIDGET RACER

Complete Plans & Parts

Price List 25¢

KICKSHAW SALES

3525 Hixson Pike

Chattanooga 5, Tenn.

KING-SIZE QUARTER MIDGETS



Ever since Iskenderian started designing and producing racing cars for the 1/4 Midgets, competition and performance took a giant step forward. Their excellent low speed torque and very high revving ability are unmatched for peak efficiency. Available for Continental, Wisconsin AKM & Cushman engines. Lobes are hardened to insure long life and durability. Grinding price, \$25.00, exchange. Outright prices available on request.

FLASH! Write direct for FREE attractive multi-colored emblems that press right on midget driver's T-shirts.

ED ISKENDERIAN

607-C No. Inglewood Ave. Inglewood, Calif.

FULLY SUSPENDED

KURTIS-KRAFT

KARTS • QUARTER & HALF MIDGETS

Send 25¢ for illustrated brochure

FRANK KURTIS CO.
525 W. Colorado
Glendale, California

INDIANAPOLIS SPEED SHOP
856 Massachusetts Ave.
Indianapolis 4, Indiana

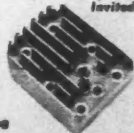
NEW ALLOY... CUTS WEIGHT IN HALF

Improved acceleration... scientifically designed for greater cooling efficiency.



FINNED Aluminum
Alloy Flywheel
\$12.95

Dealer
inquiries
invited



DEEP FINNED Aluminum
Racing Head \$14.95

Send for complete illustrated catalog

TOPAZ EQUIPMENT CO.

P. O. BOX 1185-C, REDONDO BEACH, CALIFORNIA



CLUB JACKETS

EARN BIG PROFITS, sell to your club & others special designed emblems, car plaques, T-shirts, blazers, sweatshirts, uniforms etc. Send 25¢ for discount catalog. KARL SMITH TEXTILE PRINTING, P.O. BOX 11-111-H, St. Petersburg Fla.

EMBLEMS—PLAQUES



Complete with Twin Carbon Arc Torch and accessories... to handle all metal-craft work. Acclaimed by thousands of stock, hot rod and customizing enthusiasts as the welder of 1959 use. Easily operated from properly wired 110 volt AC or DC line. The ideal gift with a life-long use. Order today on 10-day money back guarantee.

Literature on larger equipment on request
FOUR-WAY WELDER COMPANY
1818 S. Federal St., Chicago 16, Illinois, Dept. F64-N

**• LATEST!
HOTTEST!
SHARPEST!**



Styler
**BUBBLE
SKIRTS**


available to fit all popular cars
original and largest manufacturer of Bubble Skirts.

write for information
to Dept. 502

Styler CO. 14855 W.
Eleven Mile Road.
Detroit 37, Michigan.

**ALL
THE
COOLEST**

**CATS
WILL
JUMP
FOR:**



Beamed at the jazz fan who's really with it, this book offers a chance to compare the early greats with the men who make the "new sounds" of today. It points up the changes in style and technique that have taken place in the last few years, and traces the causes for this big switch to the work of such luminaries as Kenton, Davis, Mulligan, Shearing, Stitt, Baker and the like. Some of the chapter headings include "Cool Jazz," "Bop," "West Coast Jazz," "The Jazzman Grows Up." You'll especially go for the discussion of the hard-bop and cerebral-tonal types of jazz.

PETERSEN PUBLISHING CO.

5959 Hollywood Blvd., Los Angeles 28, Calif.

Enclosed is \$_____ @ 60¢ each (covers postage, etc.)

Please send me _____ copies of **JAZZ**

(Please Print)

NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

**ONLY
50¢
AT YOUR
NEWSSTAND
NOW!**

(or mail
coupon)

COMING EVENTS

SHOWS

Miami, Fla.—7/10, 11, 12—1st annual Auto Mania Car Show, Dinner Key Auditorium; So. Fla. Timing Assn.
Summit, Ill.—July 26; 4-Barrels Club Rod & Custom show; Arbo High School Memorial Field.
Littlen, Mass.—7/28; 3rd annual auto show, Donnan's Supermarket lot; Piston Poppers Club.
West Springfield, Mass.—Oct. 21-25; 2nd annual Rod & Custom World's Fair Auto Show; Eastern States Exposition Fairgrounds.
St. Paul, Minn.—Aug. 8, 9; 1st Rod & Custom Show, Vanguards Auto Club, St. Paul Auditorium.
Sheboygan, Wisc.—9/5, 6; Custom Car Showcase, Army, Kettle Moraine Motor Klub.

NHRA DRAG SCHEDULES

Dathan, Ala.—2nd & 4th Sun. Wiregrass Timing Assn.
Helena, Ala.—1st & 3rd Sun. Birmingham Timing Assn.
Chandler, Ariz.—4th Sun. Modifiers, Inc.
Winslow, Ariz.—3rd Sun. Renegades Club.
Cortile, Ark.—2nd Sun. Arkansas Timing Assn.
Little Rock, Ark.—1st & 3rd Sun. Mid-South Timing Assn.
Modena, Calif.—2nd Sun. Modena Clutchers, Inc.
Palmdale, Calif.—4th Sun. Antelope Valley Timing Assn.
Redding, Calif.—3rd Sun. Shasta Roadsters, Inc.
San Luis Obispo, Calif.—3rd Sun. San Luis Obispo Co. Timing Assn.
Santa Ana, Calif.—Ev. Sun. Orange Co. Timing Assn.
Santa Maria, Calif.—1st Sun. Dragons, Inc.
Visalia, Calif.—7/28; 9/27. Vapor Trailers, Inc.
Julesburg, Colo.—8/22-23. Platte Valley Custom Club.
Pueblo, Colo.—7/19; 8/16. Road Runners, Inc.
Kissimmee, Fla.—1st Sun. Central Fla. Timing Assn.
Lake Wales, Fla.—2nd Sun. Triangle Timing Assn.
Miami, Fla.—1st & 3rd Sun. So. Fla. Timing Assn.
Sebastian, Fla.—1st & 3rd Sun. Asphalt Angels Hot Rod Club.
Venice, Fla.—1st Sunday. Vagabonds, Inc.
Indianapolis, Ind.—2nd & 4th Sun. Indianapolis Timing Assn.
Hammond, La.—4th Sun. Ponchartrou Jaycees.
Houma, La.—2nd Sun. Houma-Terrebonne Auto Assn.
Opelousas, La.—1st & 3rd Sun. Pelican State Auto Club.
Sanford, Maine—2nd & 4th Sun. New England Hot Rod Council.
Orange, Mass.—3rd Sun. New England Timing Assn.
Greenville, Miss.—1st & 3rd Sun. Delta Angels, Greenville AFB.
Minneapolis, Minn.—Ev. Sun. Twin City Optimist Club Timing Assn.
Belgrade, Mont.—2nd Sun. Bozman Racers.
Butte, Mont.—3rd Sun. Silver Bow T.A.
Grand Island, Neb.—7/12; 8/2. Grand Island Jaycees.
Scottsbluff, Neb.—8/9. Nile Valley Timing Assn.
Carson City, Nev.—2nd & 4th Sun. Nevada Timing Assn.
Henderson, Nev.—2nd & 4th Sun. Industrial City drag strip.
Hobbs, N.M.—1st Sun. Charlotte's Auto Club.
Roswell, N.M.—2nd Sun. Dusters Auto Club, Walker AFB.
Elizabeth City, N.C.—2nd & 4th. Eastern Carolina Drivers Assn.
Akron, Ohio—7/12; 8/22-23. Cam Jumpers, Inc.
Cincinnati, Ohio—Ev. Sun. Beechmont Dragway.
Dayton, Ohio—Ev. Sun. Montgomery Co. Timing Assn.
Toledo, Ohio—Ev. Sun. Northwestern Ohio Timing Assn.
Oklahoma City, Okla.—Ev. Sun. Okla. City Drag Strip.
Tulsa, Okla.—1st & 3rd Sun. Tulsa Timing Assn.
Aurora, Ore.—1st & 3rd Sun. Multnomah Hot Rod Council & Northwest Timing Assn.
Scappoose, Ore.—7/11-12; 8/9. Columbia Timing Assn.
York, Pa.—5/31 & ev. other Sun. South Penna. Hot Rod Council.
Charlottesville, R.I.—1st Sun. So. New England Timing Assn.
Halls, Tenn.—4th Sun. Memphis Rodders, Inc.
Abernathy, Texas—1st Sun. Tri-City Drag Assn.
Caddo Mills, Texas—1st Sun. North Texas Timing Assn.
Corpus Christi, Texas—Lost Sun. Corpus Christi Timing Assn.
Marfa, Texas—3rd Sun. Marfa-Alpine Drag Strip.
New Braunfels, Texas—3rd Sun. Central Texas Racing Assn.
Newark, Texas—2nd & 4th Sun. Tarrant Co. Modified Auto Assn.
Wichita Falls, Texas—2nd Sun. Red River Timing Assn.
Salt Lake City, Utah—7/12; 8/30. Salt Lake Racing Assn.
Petersburg, Va.—Ev. Sat. Eastern Dragway, Inc.
Roanoke, Va.—1st & 3rd Sun. Roanoke Dragsters, Inc.
Bayview, Wash.—5/10 & Ev. other Sun. Bayview Timing Assn.
Kent, Wash.—Open 5/31 & ev. other Sun. Pacific Motor Raceway. King Co. Youth Auto Council.
Cheyenne, Wyo.—7/23, 25, 26. Cheyenne Timing Assn.

CHAMPIONSHIP DRAGS

Julesburg, Colo.—8/22, 23. Tune Up For Big Go.
Akron, Ohio—8/22 & 23. No. Ohio Regional.
Scappoose, Ore.—7/11-12 NHRA Reg.
Newark, Texas—[National Guard Base]—July 25—Mid-Summer Championship.
Roanoke, Va.—8/30; Blue & Gray Championship.

Edelbrock

ISKENDERIAN

WILCAP

GRAND

ORDER BY MAIL

HONEST

NEW ITEMS

ORDER BY MAIL



HONEST SPECIAL OF THE YEAR ONLY 500 TO SELL

NEW — PERFECT — 3-Inch Air Force Quick Release Safety Belts In Original Boxes



Use In Any Race Car — Dragster — Go Cart — Car — Tractor — Truck or What Have You.

HONEST NO. H-1

295 EACH

We Pay Postage

WORLD'S GUARANTEED MUFFLER

Our Mufflers carry a guarantee for the life of your car—We mean we replace it if it Burns out or Blows out—just return to us with your original invoice and we will immediately ship you another.

Honest Glaspaks have that deep Bass tone that gives car a Power sound

HONEST No. 32 each \$5.95 PAIR \$10.98

MUST KNOW CAR — Year — STD or AUTO trans

LOBES WITH MO-GO-FO-THE SLOW HONEST ELECTROKIM TEMPERED KAMSHAFTS

Cams of proven quality on the track, street or dragstrip. Every lobe hardened electronically for longer wear.

FORD

K-60 Cam 55-58 Ford Under 332 Cu In. **\$52.40**

Recommended Kit for Above Includes

Solid Lifter, Pushrods Springs & Heavy Duty Spring Retainers **\$58.35**

CHEVROLET 283 Cu. In.

K-60 Cam 55-58 283 Cu. In. Chevrolet **\$47.40**

Recommended Kit for Above Includes Solid Lifters and

Outer Springs **\$36.35**

K-60 Cam 58-59 348 Cu. In. Chevrolet **\$52.40**

Recommended Kit for Above Includes Solid Lifters and

Outer Springs **\$36.35**

Also Available for Oldsmobile and Cadillac at Honest Prices

Special Honest Introductory Offer

Limited Time Only 1938-1953 6 cyl. Chev. Combination Road and Drag Cam

Fits 216, and 235 Powerglide

No other special parts needed

HONEST No. HCP-3 Each **\$14.95**

1935-1959 6 cyl. Ply. and Dodge Combination Road and Drag Cam

HONEST No. HDP-4 Each **\$14.95**

We Pay Postage

HONEST CHARLEY SPEED SHOP INC.

SEND 25c FOR NEW 1959 MONEY SAVER CATALOG

BIGGER—BETTER THAN EVER—MORE PAGES—EACH CATALOG CONTAINS \$1.00 FREE CERTIFICATE.

GET NEXT ISSUE FREE.

BLINKING LIGHT WORRIES STOP BLINKIN' ?



Install an Honest Ammeter and Oil Pressure Assembly to replace the warning lights on your car. Know how much your battery is charging, know how much oil pressure you have. Complete instructions furnished.

HONEST NO. HAZK Each Kit **\$6.95**

WE PAY POSTAGE

UNIVERSAL MANUAL CHOKE CONVERSION KIT

To Replace Mal-Functioning Automatic Chokes

A patented unit spring loaded. Engineered for economical positive manual control with trouble free operation, eliminates stalling and restricted motor vacuum while operating engine.

ONE NUMBER Fits 95% of Applications



Easily installed, no need to remove carburetor. Complete with step by step installation instructions.

TAILORED CAP for most climatic type units. Special studs & bracket for non-climatic applications.

INSTALL A CWSO CONVERSION KIT TO ELIMINATE HEAD STARTING, STALLING, FLOODING AND ROOR MISFIRE CAUSED BY MAL-FUNCTIONING CHOKES.

C.W.S. 30 Each Kit . . . 3.95

WE PAY POSTAGE



KOLOR KROME The most successful customizing product in years featured in recent issues of Rod and Custom and Custom Car Magazines

Formulated by George Krome — Mr. Custom Car himself — Transparent Coloring for Chrome — the mirror like reflection of chrome shows through —

4 Dazzling Colors in 16 oz. Spray Can

HONEST'S No. KK-1 Pagan Gold

KK-2 Candy Apple Red

KK-3 Oriental Blue

KK-4 Parisian Green

16 oz. Can \$1.98

For Chrome — Stainless Steel — Polished

We pay Postage

SOM-RAY STREET TYPE SPUN ALUMINUM WHEEL DISC

For Street use—Same quality and design as our Famous Racing Discs—But Snap on like Hub Caps

14" — 15" — 16"

\$2.70 Each — You Pay Post.

HONEST No. 49A

WE PAY POSTAGE

Complete Set—Both Sides Postpaid \$1.95

Say which Car you want

58-59 CHEVROLET REAR LOWERING KIT

Adjustable from 3" to 4" drop. Easily installed in a few minutes.

HONEST No. HCKP

Each Kit Complete . . . \$4.95

We Pay Postage

HONEST PROGRESSIVE LINKAGE

Ball Bearing selective Progressive Linkage—replaces Factory Vacuum set up on Chevrolet — Oldsmobile — Pontiac — triple carburetor manifolds. All moving parts are ball bearing.

POSITIVE ACTION — NO DELAY IN CUT IN OF SECOND AND THIRD GEAR.

UP TO 70 m.p.h. ON ONE CARB

HONEST NO. 85 Each Complete Kit **11.95**

WE PAY POSTAGE

NEW FIESTA TYPE CHROME WHEEL COVERS WITH CHECK BACKGROUND

14" or 15"

For all cars — Replaces original factory type.

3 BAR SPINNER Heavy Construction Space for Weights

Set of 4 \$28.95

HONEST No. 40

Set of 2 \$14.50

HONEST No. 41

(State Size of Wheel)

CROSS CHECKED FLAG 4-BAR SPINNER WHEEL COVERS WITH CHECKED BACKGROUND

14" — 15" — 16"

HONEST No. 82

Set of Four . . . \$29.95

Set of Two . . . 15.00

State Size of Wheels

MAKE WHITEWALLS OUT OF BLACKWALLS

13" — 14" — 15" — 16"

Give Wheel Size

BEST QUALITY \$4.95 Set of 4

HONEST No. 9

We Pay Postage

SELECT-O-DRIVE

Combination Overdrive Selector and Hill Holder — Easy to Install — Makes 6 Forward Speeds out of Your Overdrive — Allows Clutchless Shifting, Automatic Hill Holder.

HONEST No. 85

Complete Kit

EACH \$4.95

WE PAY POSTAGE

SELECT-O-DRIVE

Combination Overdrive Selector and Hill Holder — Easy to Install — Makes 6 Forward Speeds out of Your Overdrive — Allows Clutchless Shifting, Automatic Hill Holder.

HONEST No. 85

Complete Kit

EACH \$4.95

WE PAY POSTAGE

A MUST FOR ALL CARS WITH OVERDRIVE

HONEST No. 85

Complete Kit

EACH \$4.95

WE PAY POSTAGE

6 VOLTS — 12 VOLTS ABCO DUAL VOLTAGE BATTERY

30 Months Guarantee
At last a Battery that will provide 12 volts for starting from a 6 Volt electrical system without any change in original equipment such as Generator, regulator, lights, ignition, radio, etc., or any wiring.

Will turn your present 6 volt starter as much as four times faster. Easily starts engines with very low Compression or with very high compression or with tight overhaul. Overcomes common starting troubles — temporary flooding, worn plugs, weak ignition, worn starter solenoid, worn starter, also eliminates problems of starting engines that are stubborn when hot.

No more cold morning starting problems.

Ingenious automatic switch operates battery as two 6 Volt batteries in parallel for 6 Volt operation and two 6 Volt batteries in series for 12 Volt operation. Both battery and switch are guaranteed for 30 months.



Available in two sizes:
No. 245 L 10 1/4" W 6 7/8" H 10 5/8" EACH **\$37.50**
No. 3EE L 19 1/4" W 4 5/8" H 11" EACH **\$37.50**

SOM-RAY SPUN ALUMINUM WHEEL DISCS HEAVY GAUGE

FOR DRAGGIN' OR THE STREET

14" 15" 16"

Complete With Screws and Instructions.

NEW LOW PRICE . . . HONEST No. 49 . . . \$2.70 EACH

We Pay Postage

STAR FIRE SPINNER

For All Hub Caps — easily attached with screws

HONEST No. 77 Each \$1.95

You Pay Postage

EXHAUST CUT OUT DASH CONTROL

\$2.95 Postpaid

HONEST No. 5

WE PAY POSTAGE

BOSCH COILS IMPORTED FROM GERMANY GENUINE BOSCH HI-SPEED SUPER COILS

Larger reserve capacity. Provides stronger sparks dependable ignition — even under adverse conditions of large spark gaps and low primary magnetism. Waterproof construction. Assured by solid, seamless, one-piece housing, and hermetically sealed, vibration-proof installation of all component parts.

Special insulation of superior dielectric strength insures cooler operation, longer life, safer ignition.

TK 6A5 6 Volt Ignition

TK 12A10 12 Volt Ignition

EACH \$12.75

WE PAY POSTAGE

Enclosed is \$_____ for payment in full for deposit of 25% if C.O.D.)

NAME _____

MY CAR IS A _____ YEAR _____ MODEL _____ BODY _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

Quantity Stock No. Description Price

TRANS-DAPT



CRANKSHAFT



EELCO

CRAGGAR

VERTEX

BRUCE TIRES



ENGINEERING CORPORATION

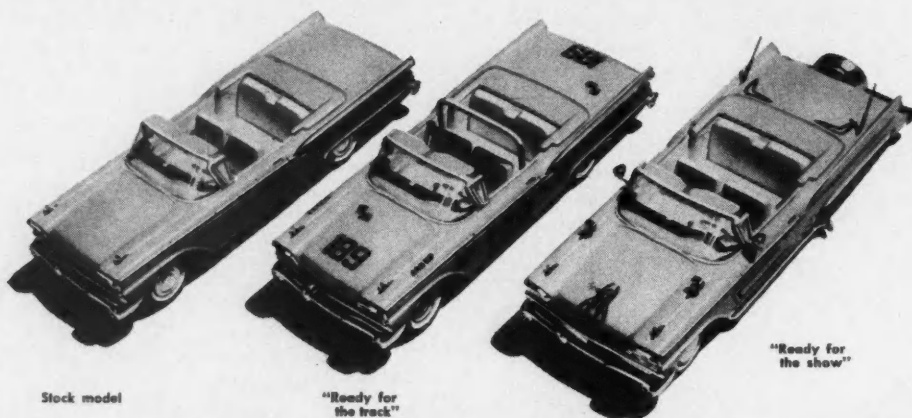
Custom made

HONEST CAMS

Box CC 1904

Chattanooga, Tenn.

AVAILABLE EVERYWHERE! AUTHENTIC SCALE MODEL CUSTOMS BY



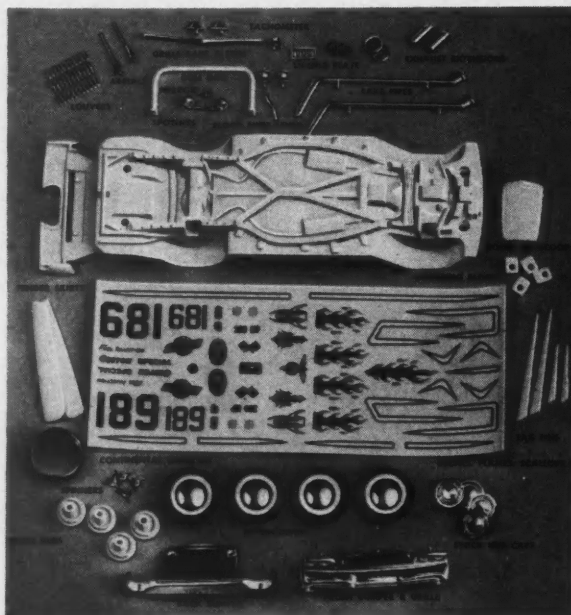
Stock model

"Ready for the track"

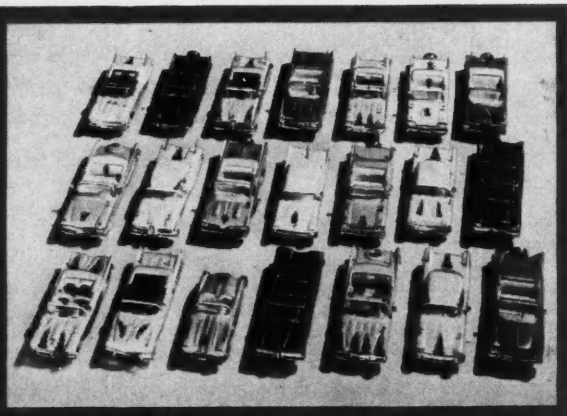
"Ready for the show"

BUILD ANY OF THESE 3 DIFFERENT MODELS FROM 1 KIT

Man, what a ball . . . customize in miniature just like you want your big car to look some day. Here's a chance to build one of Detroit's bombs just the way you'd like it. These new AMT customizing kits provide all the necessary parts—1/25th actual size. Build it just like the factory does, or for competition on the race track, or as a custom, ready for the car show. There's a choice of most all the sharpest '58 or '59 hardtops or convertibles . . . Ford Fairlane 500's, T-birds, Bonneviles, Impalas, whatever you like.



HERE'S WHAT YOU GET IN EVERY KIT—QUALITY PARTS GUARANTEED TO FIT TOGETHER WITH LITTLE EFFORT. NO CARVING, OR CUTTING, OR SANDING NECESSARY. COMPLETE INSTRUCTION SHEETS INCLUDED WITH EACH INDIVIDUAL KIT.



HERE'S JUST A FEW OF THE AMT LINE. CHECK OFF THE ONES YOU WANT . . . SO YOU WON'T FORGET

'58 CHEV. CONV. <input type="checkbox"/>	'59 BIRD CONV. <input type="checkbox"/>	'58 EDSEL CONV. <input type="checkbox"/>	'58 CONT. CONV. <input type="checkbox"/>	'58 PONTIAC CONV. <input type="checkbox"/>	'59 FORD CONV. <input type="checkbox"/>	'59 CHEV. CONV. <input type="checkbox"/>
'59 IMPERIAL CONV. <input type="checkbox"/>	'58 EDSEL HDTP. <input type="checkbox"/>	'59 PONTIAC CONV. <input type="checkbox"/>	'58 FORD HDTP. <input type="checkbox"/>	'59 FORD CONV. <input type="checkbox"/>	'58 CHEV. HDTP. <input type="checkbox"/>	'59 MERC. CONV. <input type="checkbox"/>
'58 FORD CONV. <input type="checkbox"/>	'58 BUICK CONV. <input type="checkbox"/>	'59 CORV. CONV. <input type="checkbox"/>	'59 EDSEL CONV. <input type="checkbox"/>	'58 IMPERIAL CONV. <input type="checkbox"/>	'58 PONTIAC HDTP. <input type="checkbox"/>	'59 BUICK CONV. <input type="checkbox"/>

REMEMBER: YOU CAN GET THESE KITS AT YOUR NEAREST HOBBY SHOP OR DEPARTMENT STORE EVERYWHERE



if unavailable, write to

AMT

CORPORATION 21535 Groesbeck Hwy., East Detroit, Mich.

